Information Builders

WebFOCUS

WebFOCUS Managed Reporting End User's Manual

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Preface

This documentation describes the WebFOCUS Managed Reporting end users environment, which provides easy access to the information that users need, regardless of hardware platforms, database structures, or application programs. It is intended for users that need to run and create reports.

How This Manual Is Organized

This manual includes the following chapters:

	Chapter/Appendix	Contents
1	Introducing WebFOCUS Managed Reporting	Describes Managed Reporting and the end-user components and tools you use to run, view, create, and edit reports. Also explains how to access Managed Reporting using the Java™ applet or Dashboard interfaces.
2	Using Dashboard	Describes Dashboard, which automatically connects you to WebFOCUS and WebFOCUS Managed Reporting. From Dashboard you can select a domain, use the items (reports, graphs, reporting objects, or URLs) in the Domain Tree and Role Tree, view the status of a deferred report, search domains, access reporting tools (InfoAssist, Power Painter, Report Assistant, Graph Assistant), schedule reports with ReportCaster, access the Report Library, personalize content blocks, and much more.
3	Creating Dashboard Content	Describes how to create content blocks, which display when you open Dashboard. Content blocks can contain launched reports, links to reports, or links to Internet resources.

	Chapter/Appendix	Contents
4	Using the Deferred Report Status Interface	Describes the functionality of the Deferred Report Status Interface. Provides specific procedures to guide you through viewing, saving and deleting reports, deleting deferred reports that are being processed but are not yet complete, as well as reviewing parameters for reports containing amper variables.
5	Analyzing Data in an OLAP Report	Presents the terminology and benefits of using Online Analytical Processing (OLAP). Describes how to customize reports with the OLAP selections panel and the OLAP Control Panel. Describes how to sort and apply various selection criteria (to restrict your data) as well as how to troubleshoot an OLAP-enabled report. Explains how the OLAP Control Panel (OCP) provides you with a versatile way to gain more insight from your reports by dynamically manipulating report data. From the Control Panel, you can perform every function available to a WebFOCUS OLAP user.
6	Visualizing Trends in Reports	Describes how to insert visual representations of selected data directly into your report output.

Documentation Conventions

The following table lists and describes the conventions that apply in this manual.

Convention	Description

`THIS TYPEFACE`
or
`this typeface`
	Denotes syntax that you must enter exactly as shown.

`this typeface`	Represents a placeholder (or variable) in syntax for a value that you or the system must supply.

Convention	Description
underscore	Indicates a default setting.
this typeface	Represents a placeholder (or variable), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option you can click or select.
this typeface	Highlights a file name or command.
Key + Key	Indicates keys that you must press simultaneously.
{ }	Indicates two or three choices; type one of them, not the braces.
[ ]	Indicates a group of optional parameters. None are required, but you may select one of them. Type only the parameter in the brackets, not the brackets.
|	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
...	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis points (...).
. . .	Indicates that there are (or could be) intervening or additional commands.

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To learn about the full range of available support services, ask your Information Builders representative about InfoResponse Online, or call (800) 969-INFO.

Information You Should Have

To help our consultants answer your questions effectively, be prepared to provide the following information when you call:

- Your six-digit site code (*xxxx.xx*).
- Your WebFOCUS configuration:
  - The front-end you are using, including vendor and release.
  - The communications protocol (for example, TCP/IP or HLLAPI), including vendor and release.
  - The software release.
  - Your server version and release. You can find this information using the *Version* option in the Web Console.
- The stored procedure (preferably with line numbers) or SQL statements being used in server access.
- The Master File and Access File.
- The exact nature of the problem:

- Are the results or the format incorrect? Are the text or calculations missing or misplaced?
- The error message and return code, if applicable.
- Is this related to any other problem?

- Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?
- What release of the operating system are you using? Has it, your security system, communications protocol, or front-end software changed?
- Is this problem reproducible? If so, how?
- Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing just the code to access the data source?
- Do you have a trace file?
- How is the problem affecting your business? Is it halting development or production? Do you just have questions about functionality or documentation?

User Feedback

In an effort to produce effective documentation, the Documentation Services staff welcomes your opinions regarding this manual. Please use the Reader Comments form at the end of this manual to communicate suggestions for improving this publication or to alert us to corrections. You can also use the Documentation Feedback form on our Web site, *http://documentation.informationbuilders.com/feedback.asp*.

Thank you, in advance, for your comments.

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1 Introducing WebFOCUS Managed Reporting

This documentation provides an overview of WebFOCUS and Managed Reporting. It also describes the end-user components and tools you use to run, view, create, and edit reports. Use this documentation to learn about the structure and the capabilities of each component and tool.

Topics:

- WebFOCUS and Managed Reporting Overview
- Managed Reporting Concepts
- Managed Reporting Features
- Managed Reporting Interface

WebFOCUS and Managed Reporting Overview

WebFOCUS is a complete, Web-ready, enterprise data access and reporting system, which takes advantage of the low-cost, low-maintenance, and wide distribution capabilities of the World Wide Web and internal corporate Web sites.

WebFOCUS enables application developers and Web designers to create powerful EIS and decision-support applications that deliver easy access to the information that users need, regardless of hardware platforms, data source structures, or application programs. Developers can create sophisticated Web pages that enable end users to view static reports, run dynamic reports, and create parameterized queries for individual requests.

WebFOCUS Business Intelligence Dashboard enables you to create a personalized view of WebFOCUS. When you connect to Dashboard you are also connecting to WebFOCUS Managed Reporting.

WebFOCUS Managed Reporting provides a streamlined reporting environment that virtually eliminates the complexities of today's corporate data. Your administrator defines the interface that you use to access your company's data.

Managed Reporting Concepts

Managed Reporting includes the following components:

Domains. Domains are the highest level of organization. Domains provide data on a particular topic (such as sales, inventory, or personnel). The data is stored in different forms in the following domain components: predefined reports (Standard Reports), data sources used to create reports (Reporting Objects), and reports created and saved by users (My Reports, Custom Reports, and Shared Reports).

Standard Reports. A Standard Report is a pre-defined procedure that your Administrator creates and stores in a group folder or subgroup folder. You use Standard Reports to retrieve data that changes on a regular basis, for example, monthly inventory reports or weekly sales reports. Each time you run a Standard Report the output reflects the most current data, while the format of the report remains constant.

Reporting Objects. A Reporting Object is a tailored view of a set of data that your Administrator creates and saves to a group folder. You use the data contained in a Reporting Object to create personal reports quickly and in compliance with the reporting rules and guidelines of your company.

My Reports. A My Report is a personal report you save while working in a domain. Once you access a Reporting Object and create a report, you can save the report as a My Report. Once saved, you can run or edit these reports. No other user has access to your reports.

Custom Reports. A Custom Report is a report that you create and edit using Report Assistant, Graph Assistant, or the Editor. Custom Reports are located in the Custom Reports folder located under the My Reports tab in the Domains environment. Custom Reports are available to users who have been granted the Advanced privilege in Managed Reporting. Administrators automatically have the Advanced privilege and they can assign this privilege to other users and roles.

Shared Reports. A Shared Report is a My Report or Custom Report that another user has prepared and saved with the Shared Report capability. You can run a Shared Report from the Shared Reports tab. You can also copy it to your My Reports tab and then modify it without affecting the original report.

Note: Although you can share a Custom Report with other users, if the user does not have the Advanced privilege, they can only run and run deferred the shared report. They cannot save the report. If a user has the Advanced privilege, then they can run, run deferred, save, and edit the saved copy of the report.

Static Reports. A Static Report is a type of Standard Report in which the output never changes. Unlike a regular Standard Report, which always reflects current data, a Static Report delivers a snapshot of data from a specific time. For example, a Static Report can be a Web page that contains a report.

Help System. Each domain can also contain a customized help system that you can access for specific information about your implementation of Managed Reporting.

Managed Reporting Features

In this section:

Lowercase Directory Names and File Names in WebFOCUS From UNIX

Managed Reporting offers you a selection of reporting tools that you use to create and edit reports, manipulate data in an existing report, submit a report for background processing, and view a report.

Power Painter. Power Painter is a Web layout and report creation tool that enables you to create output and page layout formats. It combines reporting, graphs, and page layout design in a single tool.

Report Assistant. Report Assistant is an HTML-based tool that you use to create tabular reports. From Report Assistant you select the data that constitutes your report, create new data from existing data, apply screening conditions to the data, as well as format and style your report.

Graph Assistant. The Graph Assistant is an HTML-based tool that guides you through the creation of a graph. The Graph Assistant enables you to create and style your graphs.

Graph Editor. The Graph Editor enables you to change the style or formatting of graph output after it appears. The Graph Editor may not be available with the graph that you run. Your Administrator will decide which graphs you can edit.

OLAP Selections Panel and OLAP Control Panel. The Online Analytical Processing (OLAP) selections panel and OLAP Control Panel enable you to view and manipulate data in your report. With these tools you can make changes "on demand" and immediately see the output that results from your selections. OLAP offers you many analytical features to help you interpret the data in your report.

ReportCaster. ReportCaster is a tool that allows you to manage and schedule the distribution of your reports. Using ReportCaster you can distribute your reports at scheduled intervals via e-mail, FTP, or to a printer.

WebFOCUS Viewer. The WebFOCUS Viewer displays report output one page at a time. This tool is useful for reports that contain a large number of pages. Only the first page is sent from the Web server to your browser. The WebFOCUS Viewer enables you to page through the output, as well as search for a specific string of text.

Deferred Receipt. Deferred Receipt allows you to submit a report for background processing. Once you submit a report, you can continue working in Managed Reporting while WebFOCUS processes the report. You then use the Deferred Report Status Interface to view the report output and save the report as a My Report.

Lowercase Directory Names and File Names in WebFOCUS From UNIX

When working with WebFOCUS GUI tools that access directories and files from a UNIX system, the WebFOCUS Reporting Server returns lowercase directory names and files by default. The WebFOCUS GUI tools also create directories and files in lowercase, regardless of the text case specified (for example, lowercase, uppercase, or mixed case). If the user creates directories or files at the UNIX command level, they must create them in lowercase.

Managed Reporting Interface

In this section:

Business Intelligence Dashboard

Java Applets

The following options are available for accessing Managed Reporting.

Business Intelligence Dashboard

The Dashboard interface is ideal for users who quickly need to run Standard Reports. Check your WebFOCUS Installation manual for information about browser compatibility.

Dashboard offers you the ability to:

- Personalize the content displayed in your Dashboard view.
- Perform advanced searches within domains.
- Access reporting tools such as Power Painter, Report Assistant, Graph Assistant, ReportCaster, and Library.
- Dynamically access non-WebFOCUS documents.

When you connect to Dashboard you are also connecting to Managed Reporting, which means all of the Standard Reports and Reporting Objects that are available to you in Managed Reporting are also available in Dashboard.

Managed Reporting is accessed by the Dashboard interface. The interface is a customizable HTML-based front-end that allows you to:

- Run Standard Reports and My Reports, either immediately or in deferred mode.
- Create reports and graphs using Reporting Objects and Report Assistant or Graph Assistant.
- Save the reports and graphs as My Reports.
- Share reports with other users.
- Edit My Reports.
- Access the OLAP selections panel and OLAP Control Panel to manipulate the data in a report.
- View reports with the WebFOCUS Viewer.

The following additional features are available depending on whether your site is licensed and your Administrator has granted you the capability to use these features:

- Schedule My Reports (ReportCaster).
- Respond to a Two-Way Email from any e-mail capable device, including pagers, laptops, desktops, and PDAs (Two-Way Email).

Java Applets

Java-based Managed Reporting is an alternative to Dashboard.

2 Using Dashboard

When you enter WebFOCUS Business Intelligence Dashboard you are automatically connected to WebFOCUS and WebFOCUS Managed Reporting.

From Dashboard you can perform the following tasks and more:

- Search for and select a domain, view the status of a deferred report, and personalize content blocks.
- Use items (reports, graphs, objects, URLs) in the Domain Tree and Role Tree.
- Access reporting tools such as InfoAssist, Power Painter (if applicable), Report Assistant, Graph Assistant, ReportCaster, and Report Library.

Note:

- Depending on how your view of Dashboard was set up, some features may not be available.
- The browser Back and Forward buttons cannot be used to navigate between Dashboard pages, or from a Dashboard View back to a page viewed before connecting to Dashboard. This applies to Public, Group, and Personal Dashboard Views.

Topics:

- Opening Dashboard
- Required Browser Settings
- Recommended Browser Settings
- Personalizing Your Dashboard
- Dashboard Layout
- Selecting a Domain
- Using Domain Tree Items
- Creating Reports in Dashboard
- Stopping Requests in Dashboard
- PowerPoint Integration With Dashboard
- Running Deferred Reports
- Viewing Content Blocks
- Using Banner Hyperlinks
- Searching Domains
- Creating a Favorites List
- Setting User Options

Opening Dashboard

How to:

Open a Public or Group View

Log On to a Personalized View of Dashboard

Change Your Password

Reference:

Considerations When Logging On to Dashboard

There are several views in the Dashboard environment:

- **Public.** A public view is accessible to public users and cannot be personalized. Public users have execute-only access; they cannot save report requests or report output to a domain. See *How to Open a Public or Group View* on page 21.
- **Group.** A group view is accessible to users with a valid Managed Reporting user ID and password. The user must be a member of the group to gain access to the view. Group views cannot be personalized by users.
- **Private.** The private view is accessible to users with a valid Managed Reporting user ID and password. From this view, you can add to or edit the content blocks your Administrator has set up. See *How to Log On to a Personalized View of Dashboard* on page 22.
- **Library Only.** The Library Only view is accessible to users with a valid Managed Reporting user ID and password who have been assigned the Library Only User role. From this view, you can view content stored in the Report Library.

The first time you log on to Dashboard, you inherit the look and content of the Dashboard view that you log on from. This happens only the first time you log on; each time you log on after that, Dashboard will look the same. For example, if you log on for the first time from a:

- Public View, you inherit the look and the content from that Public view.
- Group View, you inherit the look and content from that Group View.
- Login Page, you inherit the look and content from the General Public View.

For more information on view inheritance, see *Managing Dashboard* in the *WebFOCUS Managed Reporting Administrator's Manual.*

Reference: Considerations When Logging On to Dashboard

When you log on to Dashboard, you are prompted to enter your Managed Reporting user ID and password. Your administrator may have set up your environment so that you are also prompted for a WebFOCUS server user ID and password.

Multiple logons for a single user are available using the Dashboard main logon page and View Builder.

The URL for accessing the Dashboard logon page is:

`http://hostname[:port]/wf_context_root/bid-login?`

where:

hostname[:port]

Is the host name and optional port number (specified only if you are not using the default port number) where the WebFOCUS Web application is deployed.

wf_context_root

Is the site-customized context root for the WebFOCUS Web application deployed on your Application Server. The default value is ibi_apps.

Note: Information Builders recommends that users do not share user IDs when using features that assign ownership of content or access to information based on the Managed Reporting user ID. The features that fall into this area are Deferred Reporting and ReportCaster. Within ReportCaster there are many considerations in the area of ownership of schedules, distribution lists, access lists, Report Library access to view reports, and distribution of reports to Managed Reporting. Another area of consideration is tracing and debugging because when you are looking for the actions of a user that has multiple users using the same user ID, isolating the problem becomes more difficult.

Procedure: How to Open a Public or Group View

1. Enter the following URL in your browser to open the WebFOCUS Business Intelligence Dashboard index page:

   `http://hostname[:port]/wf_context_root/bid`

   or

   If you know the name of the page you want to go to enter:

   For public views: `http:// hostname [: port ]/ wf_context_root /bid/ viewname _mpv`

   For group views: `http:// hostname [: port ]/ wf_context_root /bid/ viewname _gbv`

where:

hostname[:*port*]

Is the host name and optional port number (specified only if you are not using the default port number) where the WebFOCUS Web application is deployed.

wf_context_root

Is the site-customized context root for the WebFOCUS Web application deployed on your Application Server. The default value is ibi_apps.

viewname

Is the name of the view given to you by your administrator.

mpv

Indicates a public view.

gbv

Indicates a group view.

2. Click *Public Views* or *Group Views*.
3. Click the public or group view you want to view.

Procedure: How to Log On to a Personalized View of Dashboard

1. From a Dashboard public view, click *Login* or enter the following URL in your Web browser:

   http://*hostname*[:*port*]/*wf_context_root*/bid/login

   where:

   hostname[:*port*]

   Is the host name and optional port number (specified only if you are not using the default port number) where the WebFOCUS Web application is deployed.

   wf_context_root

   Is the site-customized context root for the WebFOCUS Web application deployed on your Application Server. The default value is ibi_apps.

2. Enter a valid Managed Reporting user ID and password.
3. Click *Submit*. Your personalized view of Dashboard opens.

Procedure: How to Change Your Password

1. On the Dashboard logon page, click *Change Password*.

The Password Change dialog box opens.

a. In the User ID input box, type your user ID.

b. In the Password input box, type your current password.

c. In the New Password input box, type your new password.

d. In the Confirm Password input box, retype your new password.

2. Click *Submit*.

A confirmation window displays a message indicating that your password was successfully changed.

Note: If you change your password in Dashboard, it also changes for Managed Reporting.

Required Browser Settings

How to:

Set the Temporary Internet Files Option

Set Advanced Browsing Options

The following Internet Explorer browser settings are required for use with Dashboard:

- **Temporary Internet files** option to check for newer versions of stored pages with every visit to the page.
- **Advanced browsing** options to reuse windows for launching shortcuts.

Procedure: How to Set the Temporary Internet Files Option

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.

2. Click the *General* tab.

3. Click *Settings* beneath Temporary Internet files. The Settings dialog box opens.

4. Click the *Every visit to the page* option button.

5. Click *OK* to clear the Settings dialog box.

6. Click *OK* to clear the Internet Options dialog box.

Procedure: How to Set Advanced Browsing Options

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.
2. Click the *Advanced* tab.
3. Under Browsing, deselect *Reuse windows for launching shortcuts*.
4. Click *Apply*.
5. Click *OK*.

Recommended Browser Settings

How to:

Change Your Browser Colors

Change Your Browser Font

Change the Text Size in Your Browser

Override Web Page Formatting and Style Sheets

We recommend that you change the following Internet Explorer browser settings for use with Dashboard:

- Browser colors to Windows colors.
- Web page font to Arial.
- Browser text size to medium.

It is also recommended that you override Web page formatting and Style Sheets.

Procedure: How to Change Your Browser Colors

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.
2. Click the *General* tab.
3. Click *Colors*. The Colors dialog box opens.
4. Click the *Use Windows colors* check box.

   or

   Deselect the *Use Windows colors* check box and select black for the text color and white for the background color.

5. Click *OK* to clear the Colors dialog box.
6. Click *OK* to clear the Internet Options dialog box.

Procedure: How to Change Your Browser Font

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.
2. Click the *General* tab.
3. Click *Fonts*. The Fonts dialog box opens.
4. Select *Arial* for the Web page font.
5. Click *OK* to clear the Fonts dialog box.
6. Click *OK* to clear the Internet Options dialog box.

Procedure: How to Change the Text Size in Your Browser

1. From the View menu in Internet Explorer, select *Text size*.
2. From the pop-up menu, select *Medium*.

Procedure: How to Override Web Page Formatting and Style Sheets

1. From the Tools menu in Internet Explorer, select *Internet Options*. The Internet Options dialog box opens.
2. Click the *General* tab.
3. Click *Accessibility*. The Accessibility dialog box opens.
4. Deselect all of the options.
5. Click *OK* to clear the Accessibility dialog box.
6. Click *OK* to clear the Internet Options dialog box.

Personalizing Your Dashboard

You can personalize the content blocks that appear when you open a private view of Dashboard. Content blocks can contain launched reports, hyperlinks to reports, or hyperlinks to Internet resources. The following are the types of content blocks:

- **Launch blocks.** Contains only one item, which is launched when you open Dashboard.
- **List blocks.** Can contain many items and display a list of hyperlinks to reports or to Internet resources.

- **Folder blocks.** Similar to list blocks and contain the entire contents of a folder.
- **Output blocks.** May or may not contain information when Dashboard is launched. When you run a report or access an Internet resource, the output block refreshes and displays the new contents rather than open a separate browser window.
- **Tree blocks.** Adds a Domain Tree, without the sidebar frame, to a Public View or Group View page.
- **Favorites blocks.** Contains a group of frequently accessed reports, graph, hyperlinks, and any item type except Reporting Objects.
- **Watch List blocks.** Adds a Report Library Watch List interface.

You can also create content pages that contain your content blocks, or content pages that contain the ReportCaster or Report Library user interfaces. For details, see *Creating Dashboard Content* on page 77.

Dashboard Layout

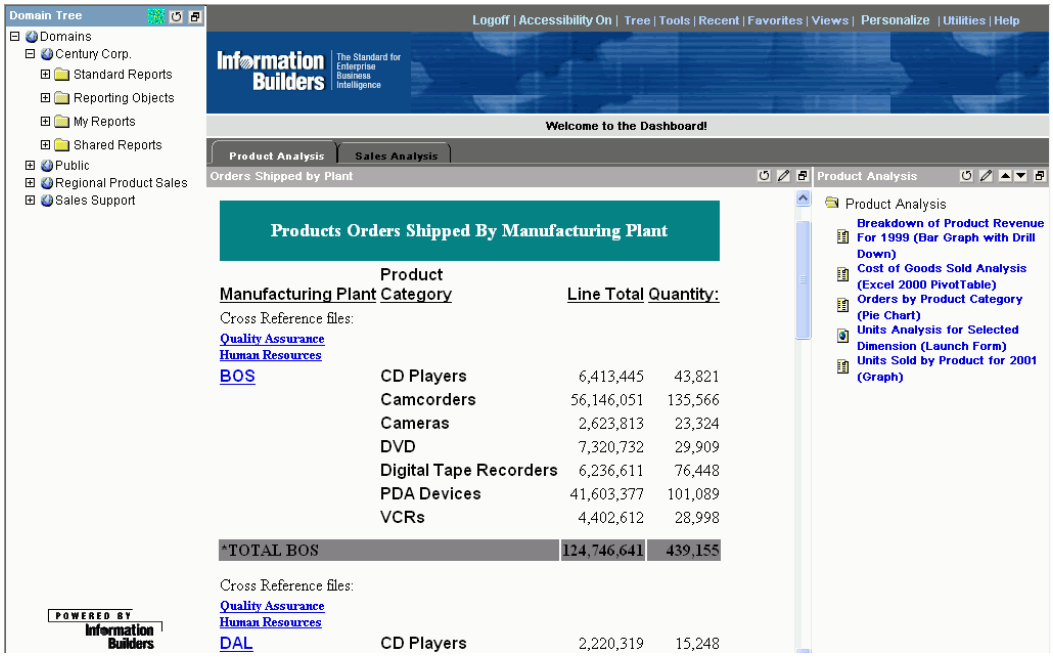
Dashboard contains the following areas:

- **Banner.** Contains hyperlinks that allow you to access various functions of Dashboard.
- **Content area.** Contains the content blocks and content pages that were set up by you or your Administrator.
- **Domain Tree.** Contains the list of reports, reporting objects, and Internet hyperlinks you can access. You can expand the Domain Tree to view the entire name of an item by dragging the control bar that separates the Domain Tree from the content area.
- **Role Tree.** Contains lists of hyperlinks to items (reports, graphs, launch pages, and URLs) in the User Groups to which you belong. You can expand the Role Tree to view the entire name of an item by dragging the control bar that separates the Role Tree from the content area.
- **Toolbars.** Toolbars are set up by your administrator and can contain hyperlinks to Web sites, other tools, applications, and documents. Hyperlinks accessed from a toolbar open in a separate browser window.

These areas may appear differently depending on how your Administrator has set up your view of Dashboard. The items may be displayed in different locations, and the Domain Tree, Role Tree, and toolbars may be hidden. The Domain Tree, Role Tree, and content blocks may appear with scrolling buttons or scroll bars.

In the Dashboard layout, the banner is on the top right of the window, the content area is on the lower right of the window, and the Domain Tree is on the left side of the window.

As shown in the following image, scroll bars appear in the launch block (Product Orders Shipped by Manufacturing Plant) and scroll buttons appear in the toolbar for the folder block (Product Analysis). If your view of Dashboard contains a Role Tree, it appears in the same area as the Domain Tree. You can toggle between the Domain Tree and Role Tree by clicking the button to the left of the Refresh Contents icon in the Domain Tree/Role Tree title bar.

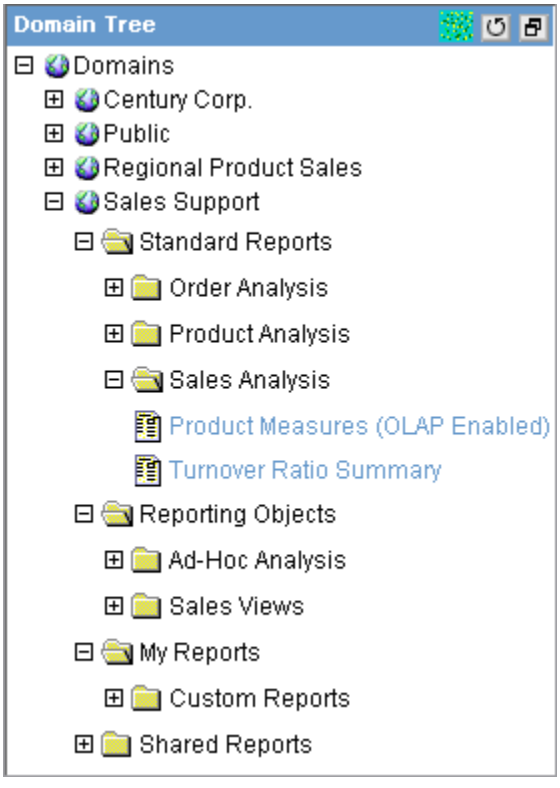


Selecting a Domain

All of the domains that a user is authorized to access are displayed in the Domain Tree by default. A user can limit the number of domains displayed in the Domain Tree by selecting a subset (Favorite Domains) of the available domains in the Domain Tree section of the Personalize Options window. For details, see *Personalize Options Window* on page 73.

Depending on how your Administrator has set up your view of Dashboard, you may not have access to the Domain Tree. There may also be a banner hyperlink called Tree, which you can select to display a floating Domain Tree in a separate browser window.

The following image shows an example of a Domain Tree displaying multiple domains, including the Sales Support domain which contains Standard Reports, Reporting Objects, My Reports, and Shared Reports folders, as well as subfolders and report icons.



A list of the domain folders and objects, populated from the Managed Reporting Domain, appear in a tree structure. You can access any of the items contained in the domain. When the contents of a Domain Tree change, such as when a My Report is added, the contents are automatically updated. You can also use the Refresh button (circle with arrow) in the toolbar to update the Domain Tree contents.

Note: If a domain is configured to restrict My Reports from being saved in it, then the My Reports and Shared Reports folders do not appear in the tree structure of that domain.

The icons located next to each item represent the item type. In the following table, the first column lists the icons, and the second column describes what they represent.

Icon	Identifies...
- **Reports**	Reports and reporting objects in a domain.
- **Internet hyperlinks**	Web pages and reports run from launch pages.

Using Domain Tree Items

In this section:

Loading Domain Tree Folders

Using Filters in Dashboard

Reference:

Dashboard Properties

A domain can contain reports, reporting objects, and Internet hyperlinks. These items are located in the Standard Reports, My Reports, Custom Reports (located within My Reports), Shared Reports, and Reporting Objects folders of a domain.

When you right-click an item from one of these folders, a menu appears that enables you to select one of the options available for that item type. Note that the Schedule, Library Version, and Filter options are available only when applicable. The options for:

- **Standard Reports** (identified by the Report icon) include Run, Run Deferred, Open, Edit Source, Cut, Copy, Delete, Publish (if you are allowed to personalize a view), Schedule, Library Versions, Add to Favorites, Add to Mobile Favorites, Filter, and Properties. The Run function does not appear if your Administrator defined the report as deferred-only.

  Note: When viewing the details of a drill-down report, use the Back button in your browser to return to the original report.

- **My Reports** (identified by the Report icon) include Run, Run Deferred, the tool used to create the report (InfoAssist, Power Painter, Report Assistant, or Graph Assistant), Delete, Publish (if you are allowed to personalize a view), Schedule, Library Versions, Add to Favorites, Add to Mobile Favorites, and Properties.

  When you delete a report, if the report is the only item in the folder, the folder is also deleted. You also have the option of deleting a folder, including all of its contents. For details about creating My Reports, see *Creating Reports in Dashboard* on page 34.

- **Custom Reports** (identified by the Report icon and located in the My Reports folder) include Run, Run Deferred, the tool used to create the report (InfoAssist, Power Painter, Report Assistant, or Graph Assistant), Editor, Cut, Copy, Paste, Delete, Schedule, Library Versions, Add to Favorites, Add to Mobile Favorites, and Properties. For details about creating Custom Reports, see *Creating Reports in Dashboard* on page 34.

- **Shared Reports** (identified by the Report icon) can include Run, Run Deferred, Save as My Report, Schedule, Library Version, Add to Favorites, Add to Mobile Favorites, and Properties. For details about Shared Reports, see *Working With Shared Reports* on page 43.

- **Reporting Objects** (located in the Reporting Objects folder and identified by the Report icon) include InfoAssist, Power Painter (if applicable), Report Assistant, Graph Assistant, and Properties. Any reports created from a Reporting Object are saved within the My Reports folder in a subfolder named for the group folder where the Reporting Object is located. For details about creating a report, see *Creating Reports in Dashboard* on page 34.

  Reporting Objects are the basis for creating My Reports and contain the data source fields that you can select in a reporting tool to build a report or graph. Reporting Objects are designed by a developer or administrator and are organized within group folders. You can open a Reporting Object with any of the available reporting tools, which include InfoAssist, Power Painter (if applicable), Report Assistant, and Graph Assistant. (If InfoAssist was used to create the Reporting Object, then the only reporting tool available when you right-click that Reporting Object will be InfoAssist.) Using the desired tool, you can select fields for your report or graph, manipulate and style the data, and save the procedure, which is automatically saved in a My Report subfolder named for the group folder where the Reporting Object is located.

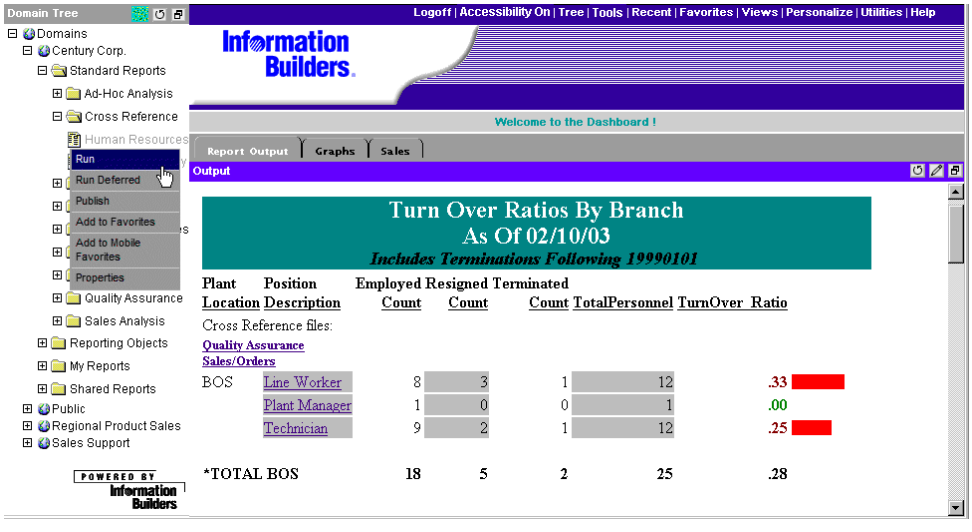
- **Internet hyperlinks** (identified by the Internet hyperlink icon) include Go To, Add to Favorites, Add to Mobile Favorites, and Properties.

For details about using the Schedule option to schedule reports, see your ReportCaster documentation.

Note:

- If you are running very large reports, you may need to increase the virtual memory on your machine. See your System Administrator for details.
- A menu does not appear if you are accessing a public view of Dashboard. Only the default action is allowed for the list items in a public view.

The following image shows the public view of Dashboard containing the Century Corporation domain. In the Domain Tree panel, right-clicking an item within the Standard Reports folder displays a pop-up menu with options that include Run, Run Deferred, Publish, Schedule (if applicable), Library Version (if applicable), Add to Favorites, Add to Mobile Favorites, and Properties.

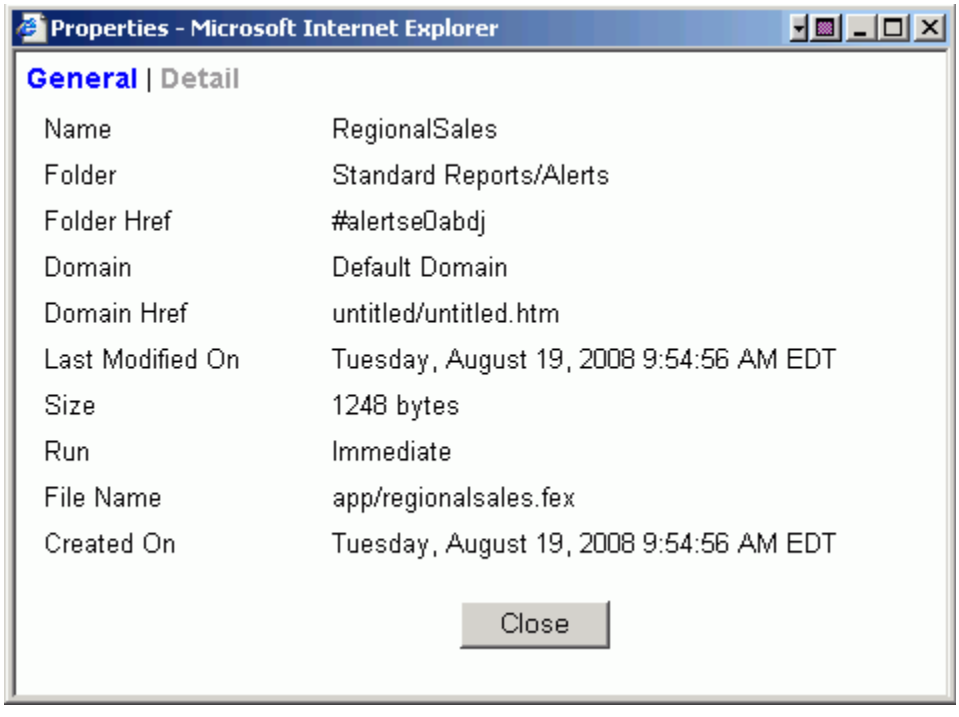


Reference: Dashboard Properties

The Dashboard Properties dialog box displays General properties for all items plus Detail properties for reports (procedures). General properties include Name, Folder, Folder Href, Domain, Domain Href, Last Modified On, Size, Run, File Name, Created On, Created By, and Last Modified By. The Created By and Last Modified By properties are not displayed by default, but can be displayed when set by the Dashboard administrator.

If you click the Detail link at the top of the Dashboard Properties dialog box, details for the procedure associated with the selected report are parsed and displayed in folders that include Master Files, Data Elements, Sorts, Conditions, Expressions, Output Format, and Join Type.

The following image shows General properties displayed in the Dashboard Properties dialog box.



Loading Domain Tree Folders

When a user opens one of the default folders in the Domain Tree, (Standard Reports, Reporting Objects, My Reports, Shared Reports), a request is sent back to Managed Reporting to retrieve subfolders directly under the top-level folder. As each node of the tree is expanded only that section of the tree is populated. This reduces the time needed to create the tree when a Domain is selected.

When reports from a folder are loaded into the Domain Tree, only a maximum of 25 report items are loaded each time. A link labeled View More is displayed in the tree to enable users to retrieve up to 25 additional items.

When you create a list, launch, or output block, clicking a folder expands the tree one level at a time.

Using Filters in Dashboard

How to:

Use Filters

You can apply filters to Standard Reports if filters have been set up for you by the Dashboard administrator. Filters enable you to quickly select predefined criteria to limit the data that is included in the report or graph you are running.

Filter selections stay in effect only for the Dashboard session. Once you log off Dashboard, all Filter selections are cleared.

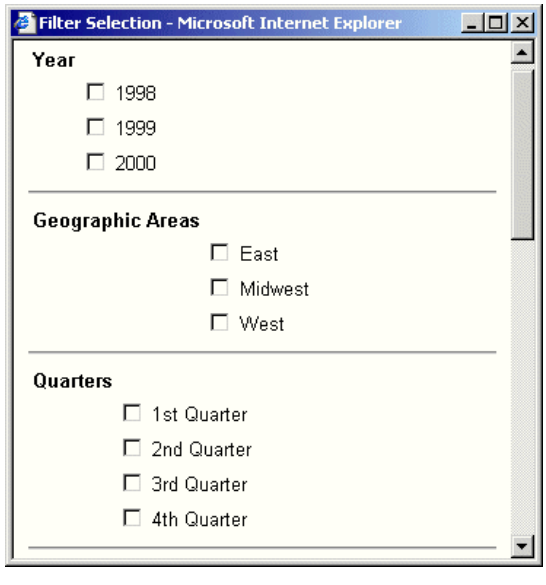
Procedure: How to Use Filters

1. Click a Standard Report.
2. From the menu, select *Filter*.

   If the Filter option is not available on the menu, this means filters have not been set up for this report.

   The Filter Selection window opens.

   Note: The Filter Selection window depends on how your administrator set up the filters. The window shown in the following image includes three check boxes for Year, 1998, 1999, and 2000; three check boxes for Geographic Areas, East, Midwest, and West; and four check boxes for Quarters, first through fourth.



3. Select the filtering options you want to use and click *Save*.

   Your selections are saved, and the Filter Selection window closes.

4. Click the report and select *Run* or *Run Deferred* to execute the report.

Creating Reports in Dashboard

In this section:

Working With Shared Reports

Uploading Data Files

Amper Auto-Prompting

Saving Parameter Selections

How to:

Create or Delete a My Report in Dashboard

Copy a Shared Report and Save it as a My Report

Create a Custom Report in Dashboard

Copy or Move a Custom Report in Dashboard

Create or Delete New Custom Report Folders

Edit a Custom Report

Reference:

Dashboard Text Editor

You can create My Reports using Reporting Objects. You can also copy a Shared Report and save and modify it as your own My Report.

In addition, you can create new reports from scratch in the Custom Reports folder. Custom Reports enable you to create your own reports using a reporting tool or the text editor. Reporting tools include InfoAssist, Report Assistant, Graph Assistant, and Power Painter. The tools you have access to are dependent on how your MR Administrator configured the Dashboard environment and whether or not you are assigned the Advanced privilege. Depending on which tool you use to create your report, you can edit your report using the same tool or the text editor. You can change the name of your Custom Report from the Properties window, and you can create new folders in the Custom Reports folder.

From Custom Reports, you can also upload (import) an external data file for use in one of the available reporting tools. For details, see *Uploading Data Files* on page 47.

Note:

- You may not be able to create reports or Custom Reports in Dashboard if you do not have privileges to do so.
- If the heading in a procedure contains a single quotation mark (') and the procedure is run in a Dashboard that is configured with SiteMinder, a message appears. This occurs because SiteMinder is configured by default to block a single quotation mark in a query string.

Procedure: How to Create or Delete a My Report in Dashboard

1. In the Domain Tree, expand the Reporting Objects folder, then expand the desired subfolder.
2. Right-click a Reporting Object and select *InfoAssist*, *Power Painter*, *Report Assistant*, or *Graph Assistant*.

   Note: The reporting tools that are available are dependent on the Dashboard configuration set by your MR Administrator. If InfoAssist was used to create the Reporting Object, then the only reporting tool available from this option list will be InfoAssist.
3. Create the report.

   For details on using:

   - InfoAssist, see the *InfoAssist User's Manual.*
   - Power Painter, see the *Creating Compound Reports With Power Painter* manual.
   - Report Assistant, see the *Creating Reports With Report Assistant* manual.
   - Graph Assistant, see the *Creating Charts With Graph Tools* manual.
4. Save the report.

   The report is saved with the name you provided in a subfolder within the My Reports folder. The subfolder is named for the group folder where the selected Reporting Object is located.

To delete a report or folder in My Reports, right-click the report or folder and select *Delete* from the menu.

Note:

- Create or edit only one report at a time when using InfoAssist, Power Painter, Report Assistant, or Graph Assistant.
- If you log off Dashboard without first closing the Report or Graph Assistant, you must manually close the tools.

Procedure: How to Copy a Shared Report and Save it as a My Report

Copying a Shared Report and saving it as a My Report enables you to edit the report or graph without affecting the original. For details, see *How to Copy a Shared Report* on page 46.

Procedure: How to Create a Custom Report in Dashboard

1. In the Domain Tree, expand the My Reports folder.
2. Right-click the Custom Reports folder and select one of the following reporting tools:
   - *InfoAssist* to create a report or chart using InfoAssist.
   - *Power Painter* to create a report, graph, or page layout using Power Painter.
   - *Report Assistant* to create a report using Report Assistant.
   - *Graph Assistant* to create a graph using Graph Assistant.
   - *Editor* to create a report or graph using the Dashboard text editor.

   Note: The reporting tools that are available are dependent on the Dashboard configuration set by your MR Administrator.

   If you have selected InfoAssist, Power Painter, Report Assistant, or Graph Assistant, you will be prompted to select a data source from which you want to report, then click *OK* to continue.

   The selected tool opens.
3. Design and then save your Custom Report.

   For details on using:
   - InfoAssist, see the *InfoAssist User's Manual.*
   - Power Painter, see the *Creating Compound Reports With Power Painter* manual.
   - Report Assistant, see the *Creating Reports With Report Assistant* manual.
   - Graph Assistant, see the *Creating Charts With Graph Tools* manual.
   - Editor, see *Dashboard Text Editor* on page 40.

Procedure: How to Copy or Move a Custom Report in Dashboard

1. In the Domain Tree, expand the My Reports folder, then expand the Custom Reports folder.
2. Right-click the existing report that you want to copy or move.

3. Perform one of the following:

   - To copy a report, select *Copy*.

     Use when you want to create a copy. Copy and Paste within Custom Reports always creates a new file with a new internal name because all the My Reports for a user are stored in a single directory. Managed Reporting uses the internal name to access the report, as well as in procedures to reference drill downs, -INCLUDE statements, and style sheet attributes.

   - To move a report, select *Cut*.

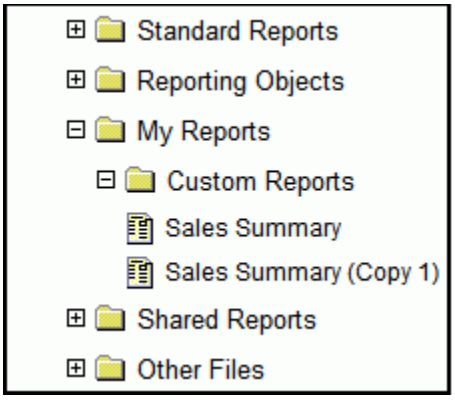
     Use when you want to move a report to a different folder within Custom Reports. The internal file name does not change.

4. Right-click a Custom Reports folder.
5. Select *Paste*.

   When you copy or cut and paste a file within a user My Reports Custom Reports folder, Dashboard evaluates the request based on the destination folder and whether or not the internal name and/or the display name of the source file exists in the destination folder. This is because all the reports a user creates are stored in a single directory in the MR Repository. All folders are virtual directories that allow you to organize your reports. Folder information is stored in the user metadata (.htm) file located in the user directory within the MR Repository.

   If you paste a file in the same My Reports Custom Reports folder, Dashboard creates a new file with a new internal name. Because it is within the same folder, Dashboard assumes you want to make a copy. A copy number is appended to the name of the copied file and Dashboard creates a new internal name for this file.

For example, when you copy and paste a file named Sales Summary within the same My Reports Custom Reports folder, the copy appears in the Dashboard tree as Sales Summary (Copy #), as shown in the following image. The new internal name is sales_summary_copy_1.fex (special characters and spaces are replaced with underscores).

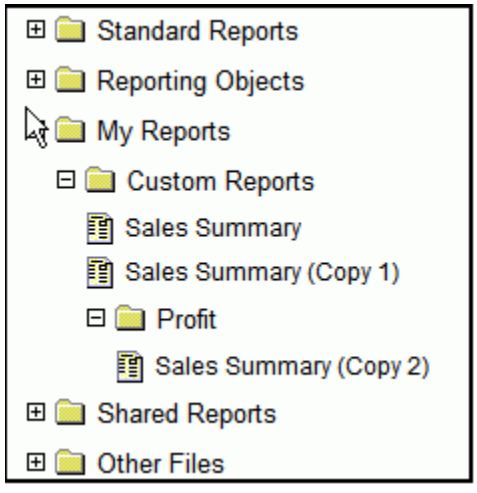


If you copy and paste a file to a different My Reports Custom Reports folder, the Confirm Create New File dialog box opens, as shown in the following image.

There already exists a My Report - Custom Report with internal name
admin/sales_summary.fex
Would you like to create the item with a new internal name?
Yes
No

This dialog box notifies you that the internal name already exists in the folder and asks you to confirm that you want to make a copy of the source file with a new internal name.

If you confirm the copy, a copy number is appended to the name of the copied file, as shown in the following image, and Dashboard creates a new internal name for this file.



Note: After pasting a file, you can change the name that displays in the Dashboard tree of the user interface using the Properties option. This does not change the internal name (filename.ext) of the file.

Procedure: How to Create or Delete New Custom Report Folders

1. In the Domain Tree, expand the My Reports folder.
2. Right-click *Custom Reports* and select *New Folder*.
3. Enter a name for the new folder in the New Folder dialog box and click *Save*.
4. The new folder appears in the Custom Reports folder.

To delete a folder in Custom Reports, right-click the folder and select *Delete*.

Procedure: How to Edit a Custom Report

Edit only one report at a time when using InfoAssist, Power Painter, Report Assistant, or Graph Assistant.

1. In the Domain Tree, expand the My Reports folder, then expand the Custom Reports folder.
2. Right-click the desired Custom Report and select the tool you created the report with (*InfoAssist*, *Power Painter*, *Report Assistant* or *Graph Assistant*) or select *Editor* to edit the report code manually in the Dashboard text editor.

   For details on using:

   - InfoAssist, see the *InfoAssist User's Manual.*
   - Power Painter, see the *Creating Compound Reports With Power Painter* manual.
   - Report Assistant, see the *Creating Reports With Report Assistant* manual.
   - Graph Assistant, see the *Creating Charts With Graph Tools* manual.
   - Editor, see *Dashboard Text Editor* on page 40.

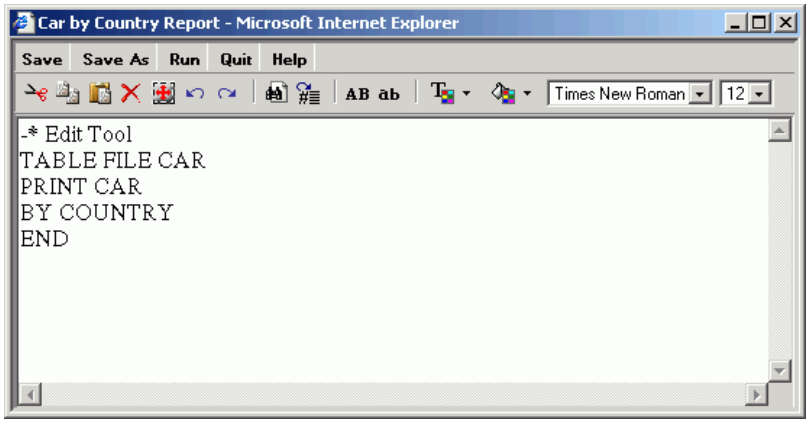
     Note: After editing with the Dashboard text editor, you will not be able to use reporting or graphing tools to open reports created using InfoAssist, Power Painter, Report Assistant, or Graph Assistant because the tools cannot read some user-added syntax.
3. Edit the report as necessary and save any changes.
4. To change the name of the custom report, click the report and select *Properties*.
5. Edit the name in the Description text box.
6. Click *OK*.

Reference: Dashboard Text Editor

You can use the text editor to create, view, edit, and run the source code for Custom Reports in Dashboard. The text editor enables you to use familiar editing techniques, such as cut, copy, and paste. You can also find and replace text and specify case.

Note: After editing with the Dashboard text editor, you will not be able to use reporting or graphing tools to open reports created with InfoAssist, Power Painter, Report Assistant, or Graph Assistant because the tools cannot read some user-added syntax.

The following image shows the text editor with a sample file in the editing window.



The following table describes all of the functions available in the Dashboard text editor. The first column lists the buttons, and the second column lists the actions they produce.

Button	Action...
Save - Save button	Saves the report. Acts as "Save As" the first time you save the report.
Save As - Save As button	Saves the report in the Custom Reports folder with a name you specify.
Run - Run button	Runs the current report.
Quit - Quit button	Exits the Editor window. If you made changes to the original report, a window prompts you to save or cancel the changes.
Help - Help button	Opens the online help.
- Cut, Copy and Paste buttons	Cuts, copies, or pastes the highlighted text.
- Delete, Select All, Undo, and Redo buttons	Deletes, selects all, undoes, and redoes.

Button	Action...
- Find and Replace button	Finds and replaces text.
- Go to line button	Enables you to go to a particular line number in the report.
- Uppercase button	Converts highlighted text to uppercase.
- Lowercase button	Converts highlighted text to lowercase.
- Text color button	Sets the text color in the editor.
- Background color button	Sets the background color of the editor. **Note:** The text color and background colors are for the current session only.
- Font drop-down menu	Enables you to change the font of the editor.
- Font size drop-down menu	Enables you to change the font size of the text in the editor.

Note:

- If you create a Custom Report using InfoAssist, Power Painter, Report Assistant, or Graph Assistant, and then edit the report with the text editor, you can only open and edit the report using the text editor.
- If you use a Firefox browser, the editing toolbar, which begins with the cut, copy, paste features listed in the table, does not appear. Use the standard control keys (Ctrl+X, Ctrl+C, Ctrl+V) to cut, copy, and paste.
- When you click the X in the upper right corner of the text editor, the procedure is saved, however the Domain Tree does not refresh. To refresh the Domain Tree contents, click the refresh button (circle with arrow) in the toolbar.

Working With Shared Reports

How to:

Share a My Report

Share a New Report

Copy a Shared Report

Edit a Shared Report

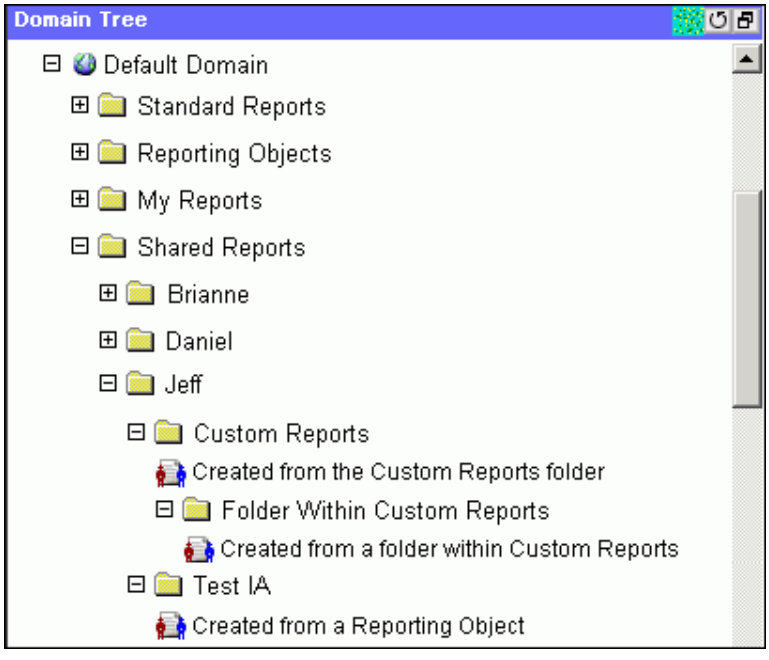
When you create reports and graphs, you may want to share them with others in your organization. The Shared Reports feature addresses this need by enabling you to create reports and graphs and make them available to other users who access the same domain.

By designating a report as shared, you allow other users to run it from the Shared Reports folder in the Domain Tree. Other users cannot edit a Shared Report in the Shared Reports folder, but they can copy a Shared Report to their own My Reports folder and then edit the copied report without affecting the original. All users who access the Domain Tree have the ability to view, run, and copy Shared Reports. Note that users with the User role cannot copy Shared Reports.

Only users who have been granted the Shared privilege by their Administrator can share a My Report. The My Reports that you contribute appear in the Shared Reports folder of other users and display the Shared Report icon. These reports also appear in your My Reports folder displaying the same Shared Report icon to denote that they have been made available to others. Note that Custom Reports can be shared in the same manner as My Reports.

The Shared Reports folder in the Domain Tree consists of folders named for other users who contributed Shared Reports. All the reports contributed by a particular user appear under the Shared Reports folder in a subfolder named for the Reporting Objects group folder, Custom Reports folder, or Custom Reports subfolder where the report was created. Shared Reports are available to all other Managed Reporting users who can access the same domain. Note that reports that you share are not listed in your own Shared Reports folder.

The following image shows three Shared Reports contributed by a user named Jeff who created and shared the reports from three different locations: the Custom Reports folder, a Custom Reports subfolder, and a Reporting Objects group folder named Test IA.



The Shared Reports folder enables you to:

- Run a Shared Report immediately by clicking the report.
- Run a Shared Report at a later time by right-clicking the report and selecting *Run Deferred*.
- Save the Shared Report to your My Reports folder by right-clicking the report and selecting *Save As My Report*. For details, see *How to Copy a Shared Report* on page 46.
- View the information about the Shared Report by right-clicking the report and selecting *Properties*. For details, see *Dashboard Properties* on page 31.
- View Report Library content (if applicable) by right-clicking the report and selecting *Library Versions*.
- Schedule the distribution of the Shared Report (if applicable) by right-clicking the report and selecting *Schedule*. For details about using the Schedule option, see your ReportCaster documentation.
- Add a Shared Report to your Favorites list by right-clicking the report and selecting *Add to Favorites*.

- Add a Shared Report to your Mobile Favorites list by right-clicking the report and selecting *Add to Mobile Favorites*.
- Ensure that you are viewing the most current list of Shared Reports by clicking the *Refresh Contents* icon, located in the top right corner of the Domain Tree panel.
- Check the status of a Shared Report that has been run deferred by clicking *Utilities* in the Dashboard banner and selecting *Deferred Status* in the menu to open the Deferred Report Status Interface window.

Procedure: How to Share a My Report

To make an existing My Report available to other users:

1. In the Domain Tree, expand the My Reports folder, then expand the Reporting Object or Custom Reports subfolder where the desired My Report is located.
2. Right-click the report that you want to share and select *Properties*.

   The Properties dialog box opens.
3. Select the *Share Report* check box and click *OK*.

The Properties dialog box closes and the report becomes available to all users who access the domain.

Procedure: How to Share a New Report

To make a new report or graph that you are creating available to every user who accesses the domain:

1. Create and save a report or graph using the InfoAssist, Power Painter, Report Assistant, or Graph Assistant tool.

   You can create and save a report or graph from either the Custom Reports folder, a Custom Reports subfolder, or a Reporting Objects group folder.
2. Locate the saved report or graph in the corresponding folder of the Domain Tree, right-click the report or graph, and select *Properties*.

   The Properties dialog box opens.
3. Select the *Share Report* check box and click *OK*.

Tip: Alternatively, if you are using Report Assistant or Graph Assistant, when you are finished creating the desired report or graph, you can click *Save As* in the File menu, select the *Share Report* check box in the dialog box that appears, type a descriptive name, and click *OK*.

Procedure: How to Copy a Shared Report

To copy a Shared Report to your My Reports folder:

1. In the Domain Tree, expand the Shared Reports folder.

   The Shared Report folder displays folders with the names of users who have contributed reports.

2. Expand the desired user folder.

   The expanded user folder displays subfolders that were used to create the Shared Reports.

3. Expand the desired subfolder that contains the Shared Report you want to copy.
4. Right-click the Shared Report and select *Save As My Report*.

   The Save As My Report dialog box opens.

   You can keep the original name or change the name of the report by deleting the original and typing a new name in the Description field.

5. Click *OK*.

   WebFOCUS copies the report to your My Reports folder.

After you copy a Shared Report to your My Reports folder, you can edit the report without affecting the original.

Procedure: How to Edit a Shared Report

1. In the Domain Tree, expand the *My Reports* folder, then expand the subfolder that contains the Shared Report you previously saved as a My Report.
2. Right-click the desired report or graph and select the reporting tool option (InfoAssist, Power Painter, Report Assistant, Graph Assistant).

   WebFOCUS opens the reporting tool used to create the Shared Report and displays the report or graph you copied from the Shared Reports folder.

3. Edit the report or graph and save your changes.

For details on using:

- InfoAssist, see the *InfoAssist User's Manual.*
- Power Painter, see the *Creating Compound Reports With Power Painter* manual.
- Report Assistant, see the *Creating Reports With Report Assistant* manual.
- Graph Assistant, see the *Creating Charts With Graph Tools* manual.

- Editor, see *Dashboard Text Editor* on page 40.

Uploading Data Files

How to:

Upload a Data File

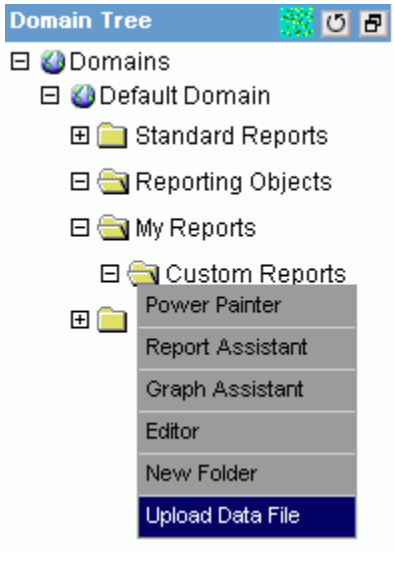
Reference:

Upload Data File Considerations

In Dashboard, you can upload (import) external data files for use in WebFOCUS reporting tools. This functionality enables you to easily create a WebFOCUS file description and data file for use in your reporting application. The Upload Data File option is enabled by default and is available to all users with access to the Custom Reports folder of the Domain Tree.

Procedure: How to Upload a Data File

1. In the Domain Tree, right-click the Custom Reports folder and select *Upload Data File*, as shown in the following image.



The first page of the Upload Data File dialog box opens displaying three sections that require you to make a selection:

- Select a file
- File Format

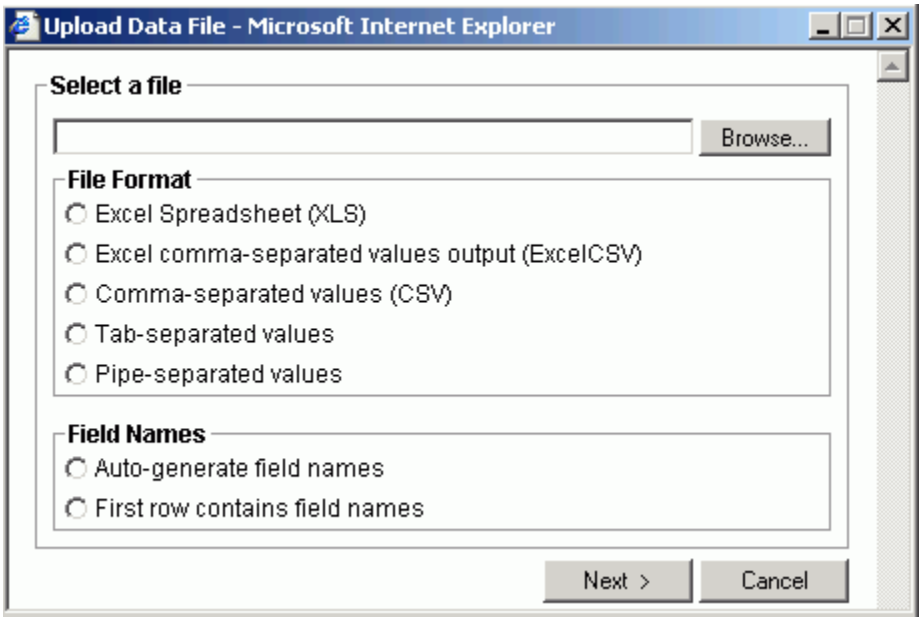
- Field Names

2. Click the *Browse* button to the right of the Select a file section.

   A Choose file dialog box opens.

3. Navigate to where the file is located and select *Open*.

   The following image shows the first page of the Upload Data File dialog box.



4. In the File Format section, select one of the following supported formats for the file you want to import:

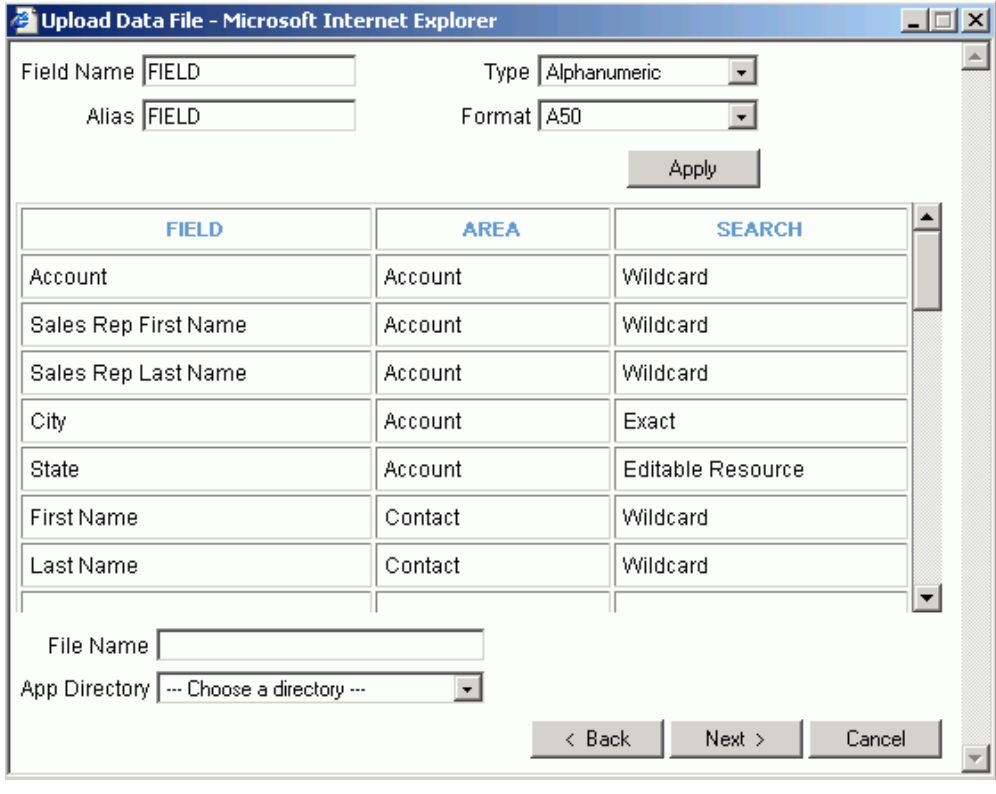
   - Excel® Spreadsheet (XLS)
   - Comma-separated values (CSV)
   - Tab-separated values
   - Pipe-separated values

5. In the Field Names section, select one of the following supported methods for how you want the field names created:

   - Auto-generate field names
   - First row contains field names

6. Click *Next* at the bottom of the Upload Data File dialog box.

   The second page of the Upload Data File dialog box, as shown in the following image, appears for you to review and customize the file conversion options.



7. For each field in the file you imported, you can select the field column heading and then edit the following attributes for that field:

   - Field Name
   - Alias
   - (Data) Type

- Format

If you change any of the attributes for a field, click the *Apply* button to apply the changes and refresh the data.

8. When all fields have been reviewed, enter a valid name in the File Name input box (spaces are not allowed) and use the Application Directory menu to select where you want the file created.
9. Click *Next* to upload the file.

   Two files are created:

   - Master File
   - Comma-delimited data file (.DAT)

   Note: If a file with the same file name already exists, a dialog box is displayed prompting you to allow file replacement.

Reference: Upload Data File Considerations

- When uploading data from a supported text file, the file must have the same type of data in each field and the same fields in every row.
- When uploading data from an Excel spreadsheet:
  - The data must be arranged in an appropriate tabular format and the spreadsheet must have the same type of data in each column and the same fields in every row.
  - The data must be stored in the first worksheet of the workbook.
  - Cells with formulas and special characters are not supported. For example, if percentages are used the cells should be formatted using the percentage data type and should not have the percentage special character "%" in the cell.
  - Excel files must be saved in a binary format. To ensure this, open an Excel file, select *File*, select *Save As*, use the Save as type drop-down list to select either *Microsoft Office Excel Workbook (*.xls)* or *CSV (Comma Delimited)(*.csv)*, then click *Save*.

Amper Auto-Prompting

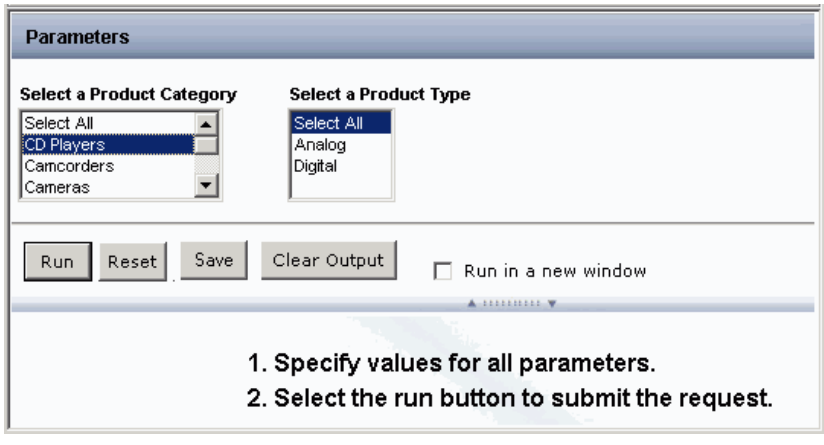
In this section:

Customizing the Amper Auto-Prompting Facility

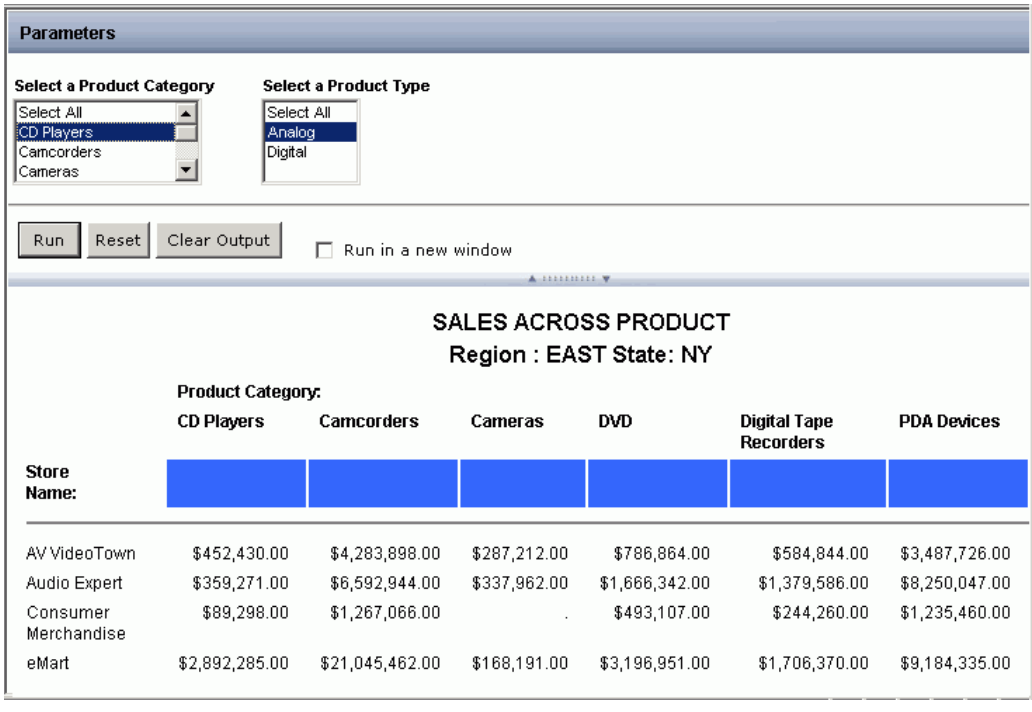
Reference:

Parameter Report Options

The amper auto-prompting facility enables you to select parameters and run the report while still being able to view and change your parameter selections. You can also display and hide parameters to widen the screen as needed. For example, the following image shows a report that requires parameter selection.



After you run the report, the output appears, as shown in the following image.



Reference: Parameter Report Options

From the amper auto-prompting launch page, you have the following options:

Button	Description
Run	Click this button to run the report.
Reset	Click this button to reset the parameter selections.
Save	The save option is only available if the Administrator has assigned you the Save entered values privilege, and you run a Standard Report with parameters from the domain tree.
Clear Output	Click this button to clear the report output area.

Button	Description
Run in a new window	Select this check box to open the report in a new browser window.
Show/Hide Parameters	Double-click splitter bar to hide parameters for full screen report view. Double-click splitter bar again to return to the original parameters and report view.

Customizing the Amper Auto-Prompting Facility

You can customize the look and feel of the amper auto-prompting facility by editing the launch page template file you are using. All of the available launch page templates are located in the ibi\WebFOCUS77\ibi_html\javaassist\ibi\html\describe directory. The default template is autoprompt_top.css.

If you want to customize the banner, create an image, save it in the describe directory, and change the background-image property, which is shown in bold type in the following Cascading Style Sheet (CSS) code:

```
#idBannerDiv {
height:41px;
background-image:url(style/logo_banner_TOP.gif);
background-position:top left;
background-repeat:no-repeat;
margin:0px;
margin-top:0px;
cursor:pointer; }
```

The option to select different launch page templates can be set in the WebFOCUS Administration Console using the Parameter Prompting selection under Client Settings, where you can set the IBIF_describe_xsl value to one of the launch page templates.

You can also enter the name of the desired launch page template in a FOCEXEC using the following code:

```
<describe_xsl>template</describe_xsl>
```

where:

template

Is set to one of the following launch page template values:

- `autoprompt_top` Displays the parameters horizontally at the top of the page and is the default template value.
- `autoprompt_top_checked` Same as autoprompt_top, but the *Run in a new window* check box is preselected.

- `autoprompt` Displays the parameters vertically at the left side of the page.
- `autoprompt_checked` Same as autoprompt, but the *Run in a new window* check box is preselected.
- `autoprompt_simple` Basic input form.

Saving Parameter Selections

How to:

Save Parameter Values to a My Report

You can save parameter selection values as a My Report for reports that run immediately or run deferred. By default, these reports are saved in the Saved Parameter Reports folder that is automatically created under the My Reports folder, but you can save parameter reports anywhere in the My Reports folder structure. In either case, the domain containing the My Reports folder cannot be restricted. If the domain is restricted, you can save the report output to any other domain that you are authorized to save to and that is not restricted.

You can also replace an existing Managed Reporting HTML form or procedure (FEX) when saving a Saved Parameter report. The replacement requires that the selected file must be the same type (HTML or FEX) as the file being saved. There are two cases for saving a Saved Parameter report:

- HTML, when saved using the Save Values option in an HTML form created by HTML Composer
- FEX, when saved from Amper Autoprompt form.

If the selected file type is not the same as the content being saved, you will receive the following message

```
To replace a file, the file types must be the same.
```

Click *OK* to close the message and return to the Saved Parameters dialog box, where you can choose another file or type a file name.

If the file name you type exists for the same file type (FEX or HTML), you will receive a message stating that the file name already exists. Click *Replace* to overwrite the existing file, or click *Cancel* to return to the Saved Parameters dialog box.

Note: Administrators and Developers can save parameter selection values as Standard Reports.

When you select Run from the menu options for Saved Parameter Reports, the saved values are used to run the report and the prompt form does not display. When you select Edit Parameters, the prompt form appears so you can make changes to the values before running the request. You can Run Deferred, which also shows the prompt form before running the request. Additional menu items for Saved Parameter Reports that are available from Dashboard are Delete, Add to Favorites, Add to Mobile Favorites, and Properties. You can also schedule the report for later execution if you have scheduling capabilities.

Note:

- Saving parameter selections is only available if you have been assigned the Save entered values privilege by your administrator.
- Multi-select drop-down list values are not selected when you view the launch form for the My Report with saved parameters.
- The Saved Parameter report and the report it was created from must reside in the same Managed Reporting Domain. If you copy a Saved Parameter report from one domain to another, you must also copy the original report to the target domain.
- When creating multiple saved parameter reports for the same report or graph, if the report or graph was created in Version 7 Release 6 and earlier, it is recommended that you create all of the Saved Parameter reports from the same procedure that contains the report or graph request. This is recommended because prior to Version 7 Release 6.1, a saved parameter report has a reference to the procedure (FEX) from which it was created. If you create a saved parameter report from an existing saved parameter report, the new saved parameter report has a reference to the prior saved parameter report, which has a reference to the original report or graph procedure. This creates a series of chained dependent procedures, and if one of the chained procedures is deleted, the reports with references to the deleted procedure will no longer run successfully.
- If you are a Developer or Managed Reporting Administrator, you can save Saved Parameter reports to the Standard Reports or Other Files folders. Note that the Edit Parameters menu option is not available for auto prompt reports that are saved with parameter values in the Standard Reports or Other Files folders. You can edit parameter values from the launch form or edit the –DEFAULT values for the procedure (FEX) using the text editor. When you run a Saved Parameter report from these folders, the auto prompt form launches with the saved parameter values selected.

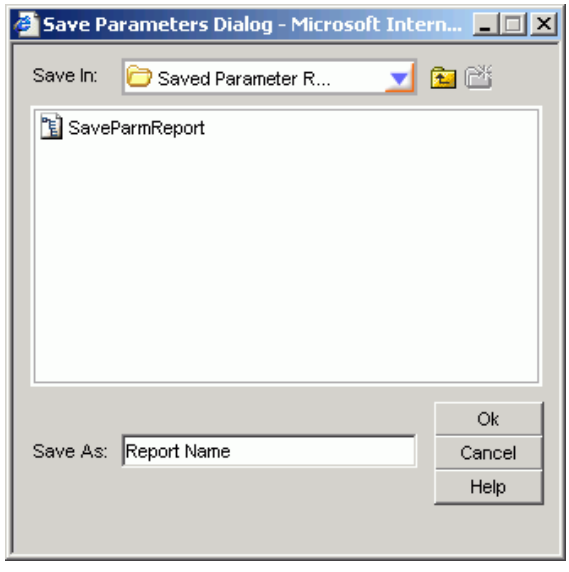
- Consider the following when you save a parameter report from an HTML form created with HTML Composer:
  - In Version 7 Release 6.9 and higher, the report is saved as a HTML form and not a procedure (FEX), and therefore, cannot be scheduled. (For more information, see Version 7 Release 6.1 and higher Upgrade Considerations.) You can schedule the report from the HTML form if it includes the Schedule option. For information on adding ReportCaster scheduling capabilities to a form, see *Designing a User Interface for a Web Application With the HTML Composer* manual.
  - In Version 7 Release 7, because Saved Parameter reports created from an HTML Composer form with Save Value option should not be edited due to their internal structure, the Restrict Developer Access property is enabled for these reports. Even though Managed Reporting Administrators can edit Saved Parameter reports, we recommend that they not because changes to these reports could render them unusable.

Procedure: How to Save Parameter Values to a My Report

1. Run a report that has parameters.
2. Select your parameter values and then click the *Save the Parameter selections as a My Report* button.

   Note: The appearance of this button may be different depending on your application.

   The Save Parameters dialog box opens, as shown in the following image.



3. From the Save In drop-down menu, you can navigate to the xxxxxx folder where you want to save the report.

   Note:

   - The Save In drop down menu is a list of domains that you are authorized to save to. The Save In value that appears when the Save Parameters Dialog box initially opens is the Saved Parameters folder under the domain where you ran the report.
   - Some domains may be restricted and not allow you to save My Reports. In this case, the OK button is not available to you (it is greyed out). When you select a domain where you are authorized to save My Reports, then the OK button is available for selection.

4. Type a name for the report and click *OK*. The report is saved in the Saved Parameter Reports folder under My Reports.

Note: You may need to click the refresh button (circle with arrow) in the toolbar to refresh the domain and view the new report.

Stopping Requests in Dashboard

You can cancel all active Business Intelligence Dashboard requests that you initiated in your browser session on all available Reporting Servers. To do this, from the Dashboard banner, click *Utilities*, then select *Stop Requests* in the drop-down menu.

A Stop Request information window opens and displays the status of the request.

Note: If this option is not available, see your Managed Reporting Administrator or Developer.

PowerPoint Integration With Dashboard

In this section:

Exporting Reports to PowerPoint From Dashboard

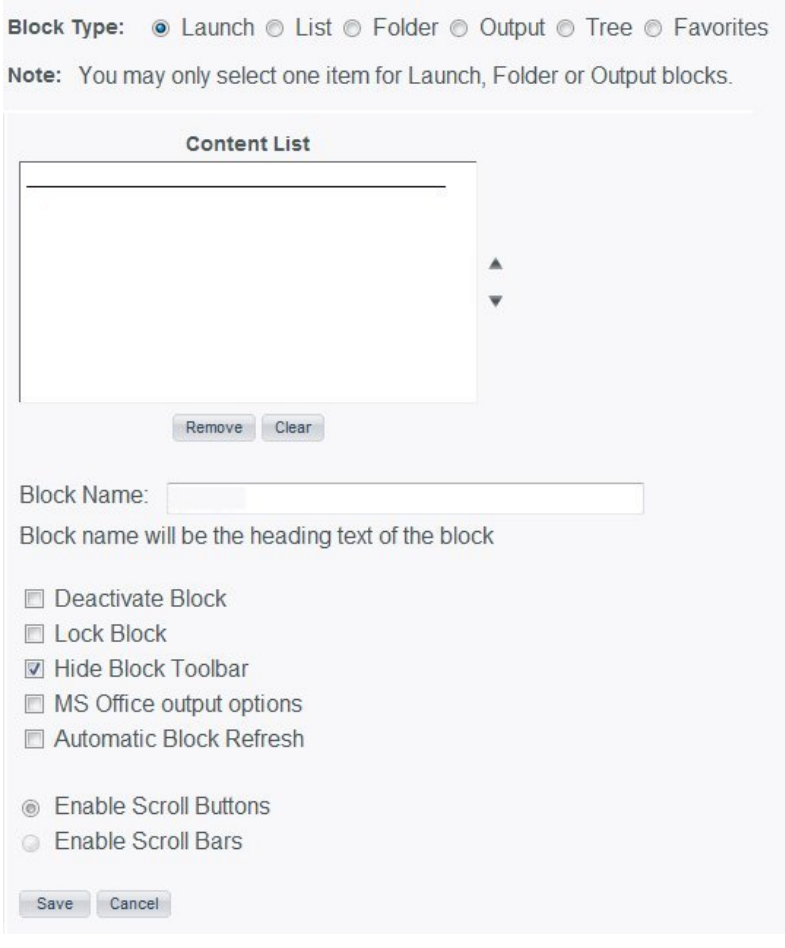
Exporting Static Graphs to PowerPoint From Dashboard

Exporting Live Graphs to PowerPoint From Dashboard

Adjusting Browser Security to Use the PowerPoint ActiveX Control

PowerPoint integration with WebFOCUS provides users with a method of exporting Dashboard reports and graphs into the PowerPoint application. PowerPoint options appear as an icon in a Launch block and present users with choices for exporting reports and graphs into new and existing PowerPoint presentations. When exporting to PowerPoint, reports retain their styling, and graphs can be output as a static image or a live graph, which is an MSChart object.

From the Add Block or Edit Block page, a developer can add the MS Office output options only to a Launch block. The MS Office output options check box, which represents the PowerPoint options, is grayed out (unavailable) for other block types and when the Launch block contains Report Library content. The PowerPoint options are available for any Launch block created for a Public View, Group View, or a user My View. The Dashboard page where you can add the MS Office output options is shown in the following image.



Note:

- You cannot export multiple reports and graphs that are embedded in a single HTML page to PowerPoint.
- PowerPoint (MS Office output option) is only supported with an Internet Explorer browser. Firefox and other browser types are not supported.

Exporting Reports to PowerPoint From Dashboard

A report can be exported from Dashboard to PowerPoint as a new presentation. A new file is created, the report is placed in the first slide, and the styling is retained.

Exporting Static Graphs to PowerPoint From Dashboard

A static graph can be exported from Dashboard to PowerPoint as a new presentation. A new file is created and the graph is placed in the first slide as an image of the graph output. Note that the datasheet object is not populated with graph data.

Exporting Live Graphs to PowerPoint From Dashboard

How to:

Export Live Graphs to PowerPoint From Dashboard

A live graph is the term used to describe an MSChart object that stores data in the datasheet object, which makes it possible to manipulate data in a graph. Live graphs can be exported from Dashboard to PowerPoint with the following menu options:

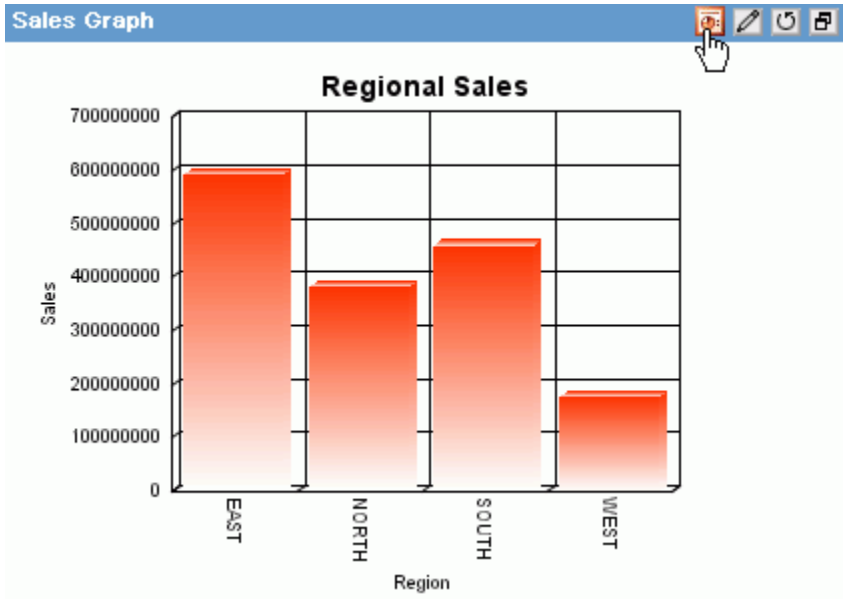
- **New PowerPoint presentation**. A new presentation is created, the graph is placed in the first slide, basic graph type styling is retained, and the datasheet object is populated with the data for the graph.
- **Open existing presentation**. A dialog box presents the user with an option to browse the desktop for an existing PowerPoint file. The selected presentation is parsed and the dialog box shows a listing of the current slides in the presentation. The user has the option of overlaying the graph (placed on top of existing content) in any existing slide or placing the graph in a new slide at the end of the presentation. The datasheet object is populated with the data for the graph.

When you export a live graph, you can select from the following list of graph types: Clustered Column, 3D Clustered Column, Clustered Bar, 3D Clustered Bar, Line, Line with Markers, 3D Line, Pie, 3D Pie, Clustered Cylinder Column, Clustered Cylinder Bar, Clustered Cone, Clustered Cone Bar, Clustered Pyramid, and Clustered Pyramid Bar.

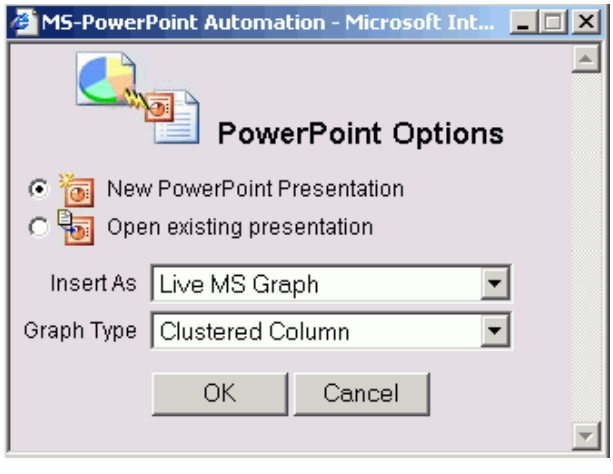
Procedure: How to Export Live Graphs to PowerPoint From Dashboard

The following procedure assumes that a developer has already added the MS Office output options to the launch block where your live graph is stored in Dashboard.

1. From the Dashboard launch block, click the *PowerPoint* icon in the title bar above the graph, as shown in the following image.



The PowerPoint Options pop-up menu appears, as shown in the following image.



2. Select either *New PowerPoint presentation* or *Open existing presentation*.
3. Select the desired Graph Type from the drop-down list.
4. If you selected New PowerPoint presentation, a new PowerPoint file is created, and the graph is placed in the first slide of the new presentation.

If you selected Open existing presentation, use the dialog box that appears to browse your desktop and select an existing PowerPoint file, then in the dialog box that appears, use the Object Insertion Position drop-down list to select *New Slide*, or an existing slide if you want to overlay existing content, and click *OK*.

Adjusting Browser Security to Use the PowerPoint ActiveX Control

How to:

Adjust ActiveX Browser Security Settings

Because WebFOCUS utilizes ActiveX to integrate PowerPoint and Internet Explorer, you have to adjust your browser security settings to use the PowerPoint ActiveX control.

Procedure: How to Adjust ActiveX Browser Security Settings

1. In Internet Explorer, from the main menu at the top of the browser, *Select Tools*, then *Internet Options*.
2. Select the *Security* tab and click the *Custom Level* button.
3. Set each of the following security settings to Prompt or Enable:
   - ❑ Download signed ActiveX controls
   - ❑ Download unsigned ActiveX controls
   - ❑ Initialize and script ActiveX controls not marked as safe

Note: PowerPoint (MS Office output option) is only supported with an Internet Explorer browser. Firefox and other browser types are not supported.

Running Deferred Reports

How to:

Run a Deferred Report

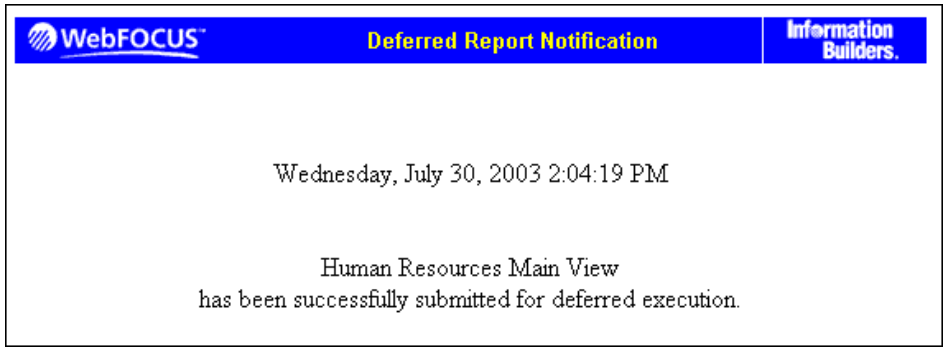
A deferred report is a report that you can run as a background task, while continuing other work. You can view information about a deferred report in the Deferred Report Status interface window. The window indicates the time the report was submitted and whether the report was completed, and provides Delete, View, Save, and Parameters options. For additional information on deferred reports, see *Using the Deferred Report Status Interface* on page 95.

Any output from a deferred report can be saved. When you save output from a deferred report, it will be saved in the My Reports folder of the respective domain.

Note: When accessing a public view of Dashboard, the deferred reports option is not available.

Procedure: How to Run a Deferred Report

1. Select an item in the Domain Tree, Role Tree, Folder, or List block.
2. Select *Run Deferred* from the menu. A notification window displays indicating that the report was successfully submitted for deferred execution, as shown in the following image.



3. To view the status of the deferred report, click *Utilities* from the Dashboard banner and then *Deferred Status* from the menu. The Deferred Report Status interface window opens.

For additional information on deferred reports, see *Using the Deferred Report Status Interface* on page 95.

Viewing Content Blocks

In this section:

Setting Automatic Refresh for a Content Block

Viewing List and Folder Block Items

When viewing content in Dashboard, the following options and information are available:

- **Content page name.** If your Dashboard view contains multiple content pages, tabs with the content page name appear along the top of the content area.
- **Block name.** Appears on the left side of the content block toolbar.
- **Refresh button.** Refreshes the contents of the block.

- **Refresh check box and time interval field.** Appears on the right side of the content block toolbar if an administrator has enabled automatic block refresh functionality. For details, see *Setting Automatic Refresh for a Content Block* on page 64.
- **Edit button.** Displays the Edit window in the View Builder. This allows you to change the block type, the contents of the block, and the block name. For details, see *Creating Dashboard Content* on page 77.
- **Scrolling.** Click any of the arrows in the content block toolbar to scroll through a report or a hyperlink list. If scrolling arrows do not appear, you can browse the block using the scroll bar.
- **Maximize button.** Allows you to maximize the content block. When you maximize a content block, it displays in a new browser window.

  Note: For active reports in a content or launch block, if you edit a field column and then maximize the block, you will not see the modifications you just made.

Setting Automatic Refresh for a Content Block

How to:

Set Automatic Refresh for a Content Block

After an administrator enables automatic block refresh functionality for a content block, a Refresh check box and refresh time interval field are displayed in the block toolbar. You can set automatic refresh functionality to have the data in your content block automatically refreshed at regular intervals. The Refresh check box is unselected by default every time you log in to the view. The refresh time interval field is populated with the minimum allowable refresh value (in seconds) by default. The refresh value represents the amount of elapsed time between recurring instances of the block being automatically refreshed when the Refresh check box is selected.

Note: Selecting the Refresh check box disables the refresh time interval field, which prevents the value from being changed. Deselecting the Refresh check box enables the refresh time interval field again.

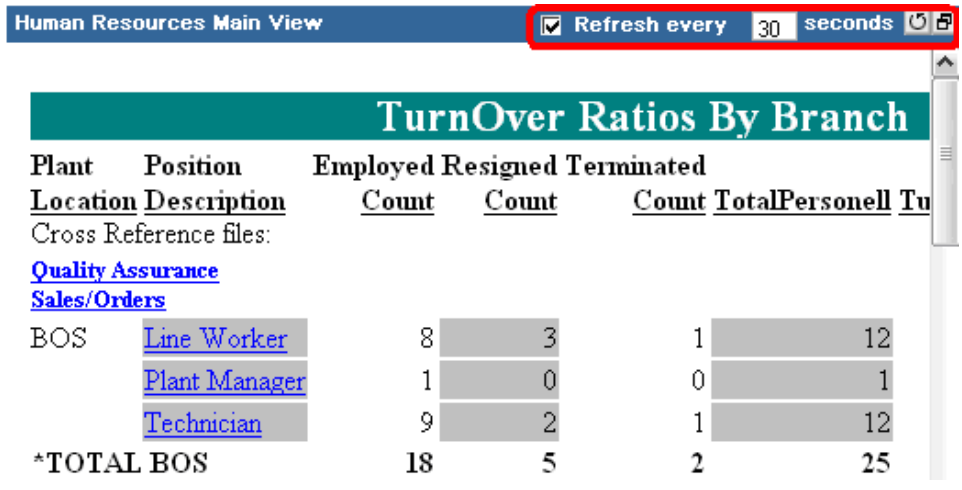
Procedure: How to Set Automatic Refresh for a Content Block

1. You have the option of using the default refresh value displayed in the block toolbar.

   or

   You can type a value in seconds that is greater than or equal to the default value displayed in the *seconds* refresh time interval field (located to the right of the Refresh check box in the block toolbar). Entering a non-integer value or a value less than the default value generates an error message.

2. Select the *Refresh* check box in the block toolbar, as shown in the following image.



Tip: If you want to edit the refresh value, deselect the *Refresh* check box, type a new value, then select the check box again.

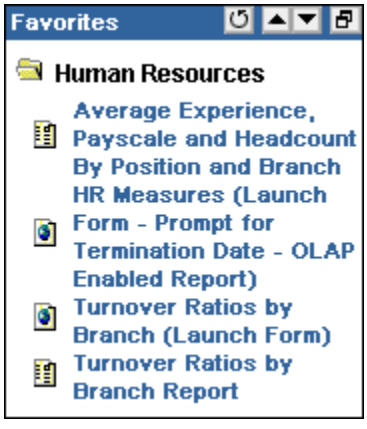
Viewing List and Folder Block Items

List and folder block items appear as hyperlinks in Dashboard. To view a list or folder block item, click the hyperlink or select the Run or Go To option from the menu. The output appears in a separate browser window unless an Output block window has been created in the content page you are viewing. If an Output block has been created, the output appears there.

When a list or folder block appears, an icon precedes each report. The following table shows a list of icons with its corresponding descriptions.

Icon	For...
- **Internet hyperlinks**	Hyperlinks and launch forms.
- **Report**	Procedures that do not require input or launch forms, and for procedures designated "Run Only as a Deferred Report".

The following image shows a sample Human Resources folder, with two procedures and two launch forms.


Favorites
Human Resources
Average Experience, Payscale and Headcount By Position and Branch
HR Measures (Launch Form - Prompt for Termination Date - OLAP Enabled Report)
Turnover Ratios by Branch (Launch Form)
Turnover Ratios by Branch Report

Note: The menu that opens when you right-click an item is not valid for items in list or folder blocks.

Using Banner Hyperlinks

The hyperlinks in the banner provide a way to easily navigate Dashboard:

- **Logon/Logoff.** Enables you to logon or logoff Dashboard.
- **Accessibility On/Off.** Enables you to turn accessibility on or off in the current browser session. The link is customizable and can be removed by an administrator in View Builder. For non-section 508 users, accessibility is disabled by default and clicking the Accessibility On link enables accessibility in the current browser session. For section 508 users, including Public users, accessibility is enabled by default and clicking the Accessibility Off link disables accessibility in the current browser session.
- **Tree.** Displays the Domain Tree and/or Role Tree as a separate window. This is useful when the Domain Tree or Role Tree is not automatically displayed for you, or when you need to maximize your Dashboard space and still have access to the Domain Tree and/or Role Tree.
- **Tools.** Opens a menu where you can select:
  - *Watch List*, which opens the Watch List interface in a separate window.
  - *Library*, which opens the Report Library user interface in a separate window.
  - *ReportCaster*, which opens the ReportCaster user interface in a separate window.
- **Recent.** Shows the most recently run reports.

- **Favorites.** Shows the reports you have added to your Favorites list. See *Creating a Favorites List* on page 71.
- **Views.** Provides hyperlinks to the Group views you have access to. The last view displayed is My View, which brings you to your personal view that you can update.
- **Personalize.** Takes you to the Content window where you can personalize your Dashboard content. See *Creating Dashboard Content* on page 77. You can also personalize Dashboard Options from this menu.
- **Utilities.** Opens a menu where you can select:
  - *Deferred Status*, which opens the Deferred Report Status interface. See *Running Deferred Reports* on page 62.
  - *Domain Search*, which opens the Domain Search window. See *Searching Domains* on page 67.
  - *Stop Requests*, which allows you to cancel all active requests that you initiated from your Business Intelligence Dashboard browser session on all available Reporting Servers.
- **Help.** Opens a menu where you can select:
  - *Contents and Index*, which opens the WebFOCUS BI Dashboard online help.
  - *About WebFOCUS BI Dashboard*, which provides release information.
- **Language.** Enables the user to display Dashboard in one of the available languages. This hyperlink only appears in Public Views that are configured to run in more than one language.

Note: Depending on how your view of Dashboard has been set up, you may not have access to all of the banner hyperlinks.

Searching Domains

In this section:

Basic Search

Advanced Search

The domain search allows you to perform specific searches of the domains available to you. You can perform basic and advanced searches, and combine the available search options.

You can add items from a domain search to your favorites list directly from the search results window. You can also use domain search when creating content blocks to quickly find items.

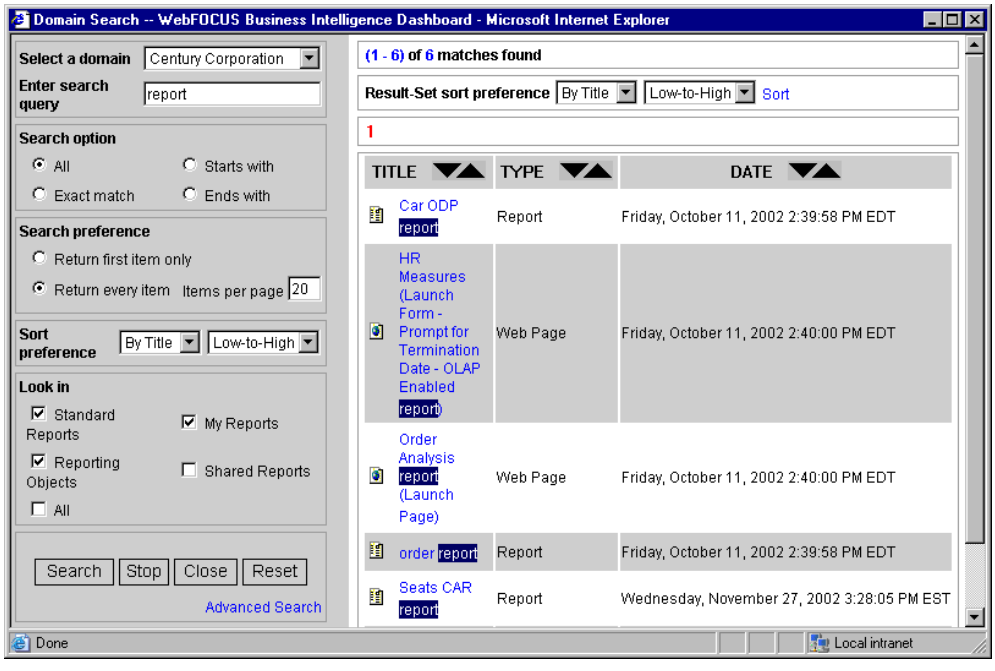
Access the domain search by selecting the Utilities hyperlink in the banner and then Domain Search from the menu.

Basic Search

Basic searches allow you to search for items within a domain. Search options include:

- **Select a domain.** Select the domain you want to search. To search across all available domains, select the All Domains item.
- **Enter search query.** Enter a text string for which you want to search. The search looks for matching values within the title of the domain. If you leave this value blank, all available items from the selected domain are returned to the output panel on the right side of the window.
- **Search option.** Select from the following:
  - **All** searches for the text string anywhere within the titles.
  - **Exact match** searches for a title that exactly matches the string entered.
  - **Starts with** searches for a title that starts with the search string.
  - **Ends with** searches for a title that ends with the search string.
- **Search preference.** Select from the following:
  - **Return first item only.** Returns only the first matching value.
  - **Return every item.** Returns all matching values.
  - **Items per page.** Allows you to restrict the number of returns displayed on one browser page. The default number of hits is 20.
- **Sort preference.** Sort results by title, type, or date the item was last updated. You can also sort in ascending (low-to-high) or descending (high-to-low) order.
- **Look in.** Specify the type of folder you want to search in. This option is not available when accessing a public view of Dashboard. Select from:
  - **Standard Reports.** Searches for the value only in the Standard Reports folder.
  - **Reporting Objects.** Searches for the value only in the Reporting Objects folder.
  - **My Reports.** Searches for the value only in the My Reports folder belonging to the user performing the search.
  - **Shared Reports.** Searches for the value only in the Shared Reports folder.
  - **All.** Does not restrict the type of domain folder to search.

The following image shows a sample search window. The search options are on the left, and the search results are on the right.



Advanced Search

How to:

Search a Domain

Advanced searches allow you to specify additional search criteria. You can specify the following in an advanced search (in addition to all of the basic search options):

- **Look for.** Restricts the search to a particular file type. You may select more than one file type. Select from:
  - **Report.** Searches only for reports.
  - **Web Address.** Searches only for hyperlinks.
  - **Web Page.** Searches only HTML pages.
  - **Folder.** Searches only for folders.
  - **All.** Does not restrict the type of domain object to search.

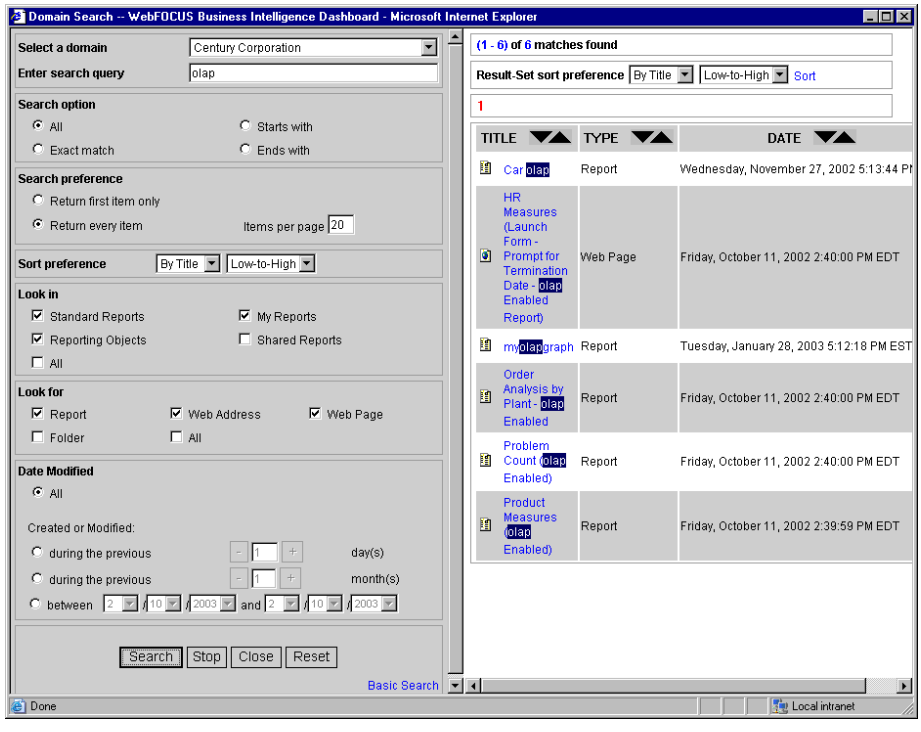
- **Date Modified.** Enables you to search for items in a specific date range. Select from:
  - **All.** Searches without date restrictions.
  - **During the previous (number of) days.** Searches only those reports that were created or modified in the past number of days you specify.
  - **During the previous (number of) months.** Searches only those reports that were created or modified in the past number of months you specify.
  - **Between (date 1) and (date 2).** Searches only those reports that were created or modified between the set of dates you specify.

The format of the date and time shown in the Domain Search Results window, and in the Modified since panel, are based on your system setting.

Procedure: How to Search a Domain

1. From Dashboard, click *Utilities*.
2. Select *Domain Search*. The search window displays in a separate browser window.
3. If necessary, click *Advanced Search* for more options.
4. Select the domain you wish to search from the drop-down list, or select *All Domains*.
5. Enter the text string you wish to search for in the text box.
6. Click the option buttons and check boxes next to the desired search options. For details on basic search options, see *Basic Search* on page 68. For details on advanced search options, see *Advanced Search* on page 69.
7. Click *Search* to search your domains, or *Reset* to reset all of the search options to the default values.

As shown in the following image, search results are returned in a list block on the right side of the window. The list contains the item title, item type, the date, and the path information. You can sort the results using the arrows in the title bars. You can add items from the search results window directly to your favorites list.



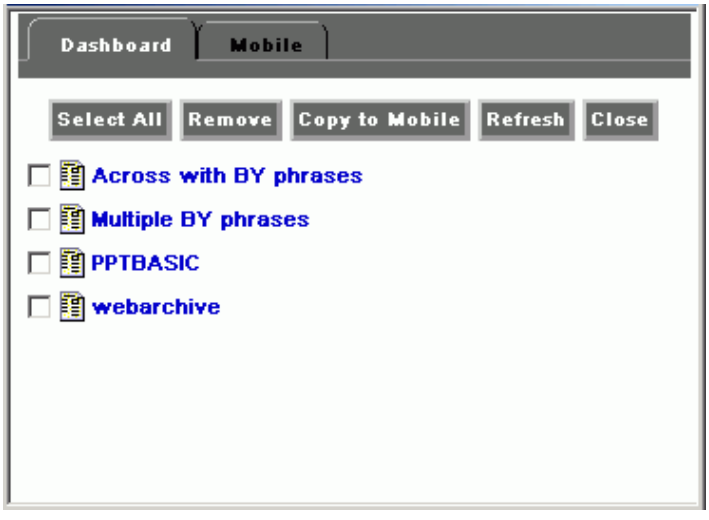
8. Close the window to exit the search.

Creating a Favorites List

In Dashboard, you can populate your Favorites list with reports, graphs, hyperlinks, and any other item type (except reporting objects) that you want to quickly and easily access. The Favorites list contains two tabs, Dashboard and Mobile, and is easily accessible from the Favorites hyperlink in the banner.

Note: You can also add a Favorites content block that will automatically display your list of favorites in your Dashboard view. For instruction on creating a content block, see *Adding a Content Block* on page 82.

The following image shows the Favorites dialog box displaying a sample list of saved reports in the Dashboard tab.



Report items stored in the Dashboard tab of the Favorites list are sorted alphabetically by title. All of the options that are normally available for an item are available from the Favorites list including Run, Run Deferred, and Schedule.

You can add an item to the Dashboard tab in the Favorites list from a Domain Tree, Role Tree, List block, Folder block, Tree block, or Domains search result. To add an item to your Favorites list from any of these areas, right-click the item and select *Add to Favorites*.

If you want to remove an item in your Favorites list, select the check box next to the item and click *Remove*. You can remove all items by clicking *Select All* and then clicking *Remove*.

If you want to copy an item to the Mobile tab from the Dashboard tab of the Favorites list, select the check box next to the item and click *Copy to Mobile*. You can refresh the list of report items by clicking *Refresh*. To close the Favorites dialog box, click *Close*.

Setting User Options

Reference:

Personalize Options Window

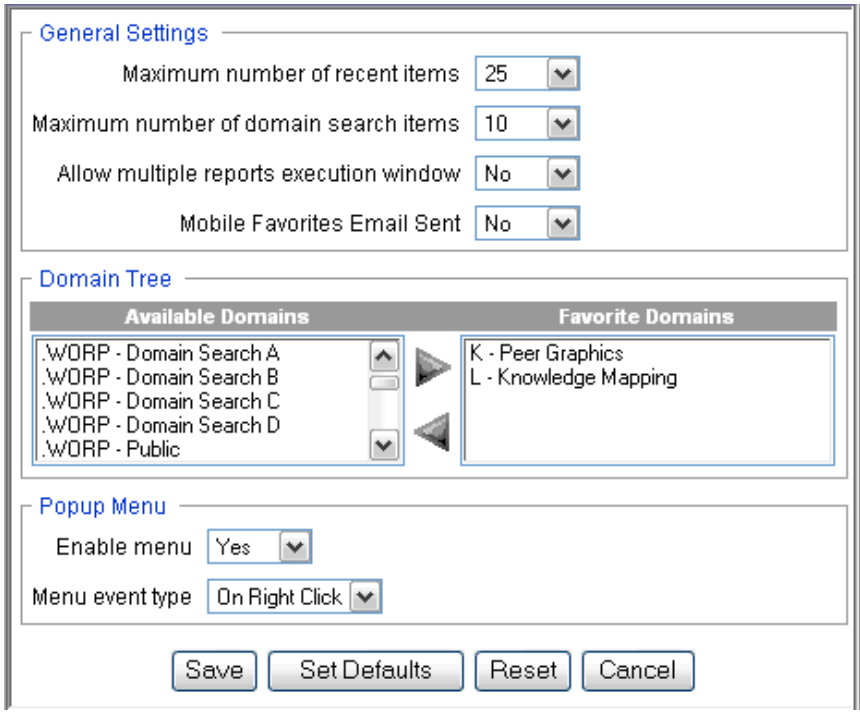
Establishing Site Defaults for Personalize Options

You can set personal options for your Dashboard view from the Personalize Options window. You can choose which domains are displayed when you log on to Dashboard, how to display and implement pop-up menu functionality, and select from several other user options.

Setting user options is not available for Public or Group views.

Reference: Personalize Options Window

To personalize your Dashboard view, access the Personalize Options window, shown in the following image, by selecting the *Personalize* link in the banner, and then selecting *Options* from the submenu that appears.



The Personalize Options window contains the following three sections: General Settings, Domain Tree, and Popup Menu.

- The General Settings section enables you to set the following:
  - Maximum number of recent report items that can be displayed (default is 25).
  - Maximum number of domain search items that can be displayed (default is 10).
  - Allow multiple reports execution window. When set to No (the default), if you are not using an Output block, a new browser window opens when a report is run. When set to Yes, additional reports open in and reuse any existing browser windows.

- Mobile Favorites Email Sent. When set to No (the default), if you right-click a report item and select *Add to Mobile Favorites*, a dialog box opens where you can send an e-mail containing a link to your Mobile Favorites (which changes the setting to Yes). When set to Yes, you have to click *Send Email* in the Mobile tab of the Favorites window to send an e-mail with a link to your Mobile Favorites.

- The Domain Tree section enables you to select the domains to be displayed when you log on to Dashboard. By default, all of the domains available to you are displayed in the Domain Tree and listed in the Available Domains box. You can move domains to the Favorite Domains box to limit the display of domains in the Domain Tree to a subset of the domains available to you. Use the arrows between the boxes or double-click a domain to move it from one box to the other. If the Favorite Domains box is empty, all domains are displayed in the Domain Tree.

- The Popup Menu section has two options, an option to enable menu and an option to select the menu event type. The enable menu option determines if the pop-up menu is displayed or not. When the enable menu option is set to the default value of Yes, pop-up menu behavior is the same as in previous releases. If the enable menu option is set to No, the pop-up menu does not display, and the first (default) action that normally appears in the pop-up menu is taken when a user clicks an item. For Standard Reports, the default action is Run. Other non-default actions, for example, Run Deferred, are not available when the enable menu option is set to No. The No setting does not affect the pop-up menu shown for Banner links.

  If the enable menu option is set to Yes, a user can select menu event type options that control how the pop-up menu is displayed. The menu event type options available in the drop-down list are On Right Click and On Hover. On Right Click is the default setting which causes the pop-up menu to be displayed using the right mouse button instead of the left mouse button. Additionally, selecting this option enables a user to perform the default option when left clicking the mouse while also viewing the pop-up menu with a right click. The On Hover setting enables a user to view the pop-up menu when the mouse pointer hovers over an item that yields a menu.

  Note: Popup Menu settings affect how the pop-up menu is displayed for the Domain Tree and the Role Tree. The Banner Link items, which include Tools, Personalize, Utilities, and Help, are accessed only by Left Click. Popup Menu settings also affect the display of Domain items in a List or Folder block.

At the bottom of the Personalize Options window, there are buttons you can use to Save, Set Defaults, Reset, and Cancel.

Reference: Establishing Site Defaults for Personalize Options

The Personalize Options settings can be changed for a specific site by editing the bid-user-preferences.xml file located in the worp/conf directory. After making changes to this file, the WebFOCUS Web application must be reloaded.

Each user inherits a copy of the bid-user-preferences.xml file the first time they connect to Dashboard. Each user's personal settings are stored in the user-prefernces.xml file of their own directory in worp_users. Any changes to the original bid-user-preferences.xml file does not affect preferences of a user that are stored in their own personal files.

3 Creating Dashboard Content

When opening Dashboard, content blocks display and contain launched reports, hyperlinks to reports, hyperlinks to Internet resources, or output. The following are the types of content blocks:

- Launch blocks.
- List blocks.
- Folder blocks.
- Output blocks.
- Tree blocks.
- Favorites blocks.
- Watch list blocks.

Topics:

- Creating Dashboard Content Overview
- Content Window
- Creating Content Pages
- Adding a Content Block
- Editing a Content Block
- Selecting Content Layout

Creating Dashboard Content Overview

When creating a content block, select the block type, the block contents, and the block layout, and for administrators, the public or group view to which the block is associated.

You can create content pages to increase content space, organize Dashboard content, and add pages that display the ReportCaster, Report Library, Watch List, or Deferred Status user interfaces. For details, see *Creating Content Pages* on page 80.

Content Window

How to:

Access the Content Window

Exit the Content Window

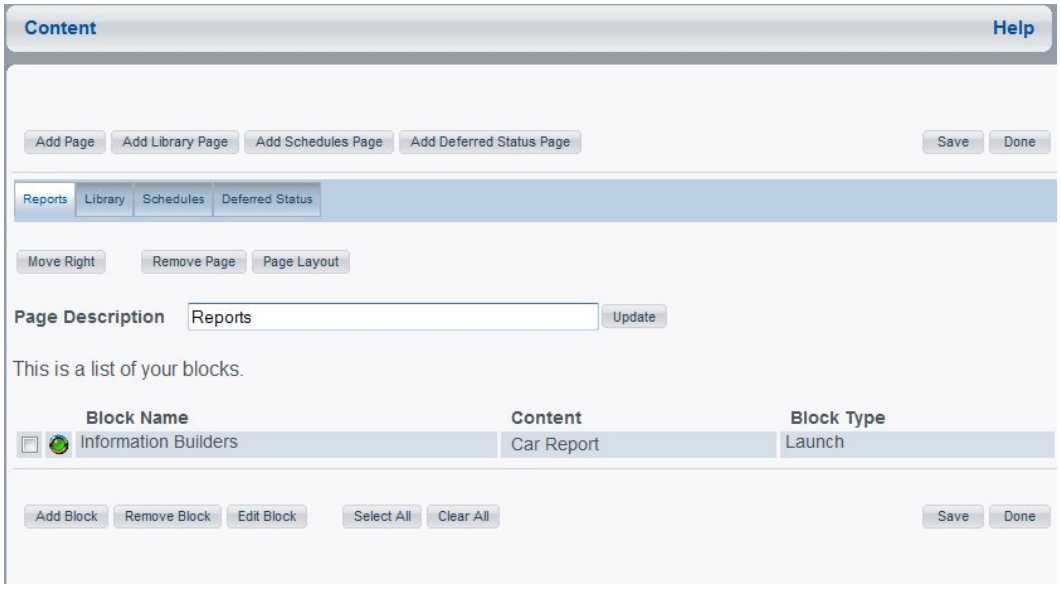
From the Content window, you can create the content blocks that appear when Dashboard opens. You can also:

- Create content pages that contain content blocks, or the ReportCaster, Report Library, or Deferred Status user interfaces.
- Add, remove, and edit content blocks.
- Select the content layout.

When you open the Content window, a list of the current content blocks appears. When you place your cursor over a content item, the full path of the procedure appears, including the domain name and folder name.

If you are opening the Content window for the first time, the content list displays the content blocks and pages your administrator has set up for you. You can edit or remove these.

The following image shows a sample Content window with three distinct panes. The first two sections provide a description text box and buttons to add and create content pages, and the third section contains buttons for adding, editing, or removing content blocks.



Procedure: How to Access the Content Window

1. From the Dashboard banner, click *Personalize*.
2. Select *Content* from the menu. The Content window opens.

Procedure: How to Exit the Content Window

For users, after you have created all of your content blocks, click *Done* on the Content window to save all changes and exit the Content window. Dashboard automatically refreshes to include your changes, and you return to the Dashboard view.

Creating Content Pages

In this section:

Publishing Reports to Content Pages in Dashboard

How to:

Create Content Pages

You can create Dashboard content pages that contain content blocks, and the ReportCaster, Report Library, Watch List, and Deferred Status user interfaces. Accessing the ReportCaster, Report Library, Watch List, or Deferred Status interface from its own Dashboard content page is different than accessing the interface from banner hyperlinks, which open a new browser window when the hyperlink is clicked.

Content pages appear as tabs that display the name of the content page across the top of the content area. Content pages can be viewed by clicking the appropriate tab.

Using content pages enables you to:

- Expand the amount of space you have to display content in Dashboard.
- Organize Dashboard content.
- Keep the default view created by the Dashboard Administrator and create your own personalized content pages.

Content pages are optional. If you have only one content page, tabs do not appear in the actual Dashboard view when you add content blocks.

You can create a content page and add a report to it through the Personalize menu, or through the Publish option in Standard Reports and My Reports drop-down menus, as explained in *Publishing Reports to Content Pages in Dashboard* on page 81.

Users can create any number of content pages and design the page layout. Administrators can also customize the color of content page tabs (background and text color). For details, see *Selecting Content Layout* on page 93.

When creating content pages, note that:

- You can rearrange the order of the pages using the Move Left, Move Right, and Set Default buttons in the Content window. The Set Default button promotes the current page to the first page.
- Only one output block is allowed per page.
- When Dashboard opens, only the reports on the current content page are executed. All other reports are executed when you click the respective content page tab.

- Reports on content pages do not automatically refresh when tabbing from one page to another. To refresh a report, click the *Refresh* button in the toolbar for that report.

Procedure: How to Create Content Pages

1. Select the *Personalize* link in the banner, then select *Content* from the submenu that appears.

   The Content window opens.

2. From the Content window, click:

   - *Add Page* to add a page that contains content blocks.
   - *Add Library Page* to add a page that contains the Report Library user interface. You can also add the Watch List interface after adding a library page.
   - *Add Schedules Page* to add a page that contains the ReportCaster user interface.
   - *Add Deferred Status Page* to add a page that contains the Deferred Status user interface.

   Note: You will not be able to view Library or Schedule pages if you do not have access to ReportCaster or the Report Library.

3. Enter the tab name in the Page Description text box.
4. Click *Update*.

   When a page is added, it is added as the last page. You can rearrange the order of the content pages using the Move Left, Move Right, or Set Default buttons. The Set Default button promotes the current page to the first page.

   Note: When creating a content page, wait until all page items appear before using the buttons on the page. If an error occurs due to premature use of the buttons, refresh the page using your browser Refresh button.

Publishing Reports to Content Pages in Dashboard

The Publish option provides a single-step method to add a report to a launch block within a content page in Dashboard. This option is available to users with the ability to personalize the view.

The Publish option is only available for Standard Reports and My Reports when you right-click a report in the Dashboard Domain Tree or from any of the following Dashboard items:

- Favorites list
- Recents list

- Floating Domain Tree
- Domain Search results

Note: The Publish option is also available from a saved Standard Report or My Report opened in InfoAssist. For details on using InfoAssist, see the *WebFOCUS InfoAssist User's Manual*.

To publish a report to a content page in Dashboard, right-click the Standard Report or My Report and select *Publish*. The content page and content block appear immediately in Dashboard. You can edit or delete the content block as you would any other content block.

Adding a Content Block

In this section:

Removing a Content Block

How to:

Add a Content Block

Add Items to a Content Block Using Domain Search

From the Add Block window, you can create content blocks.

The following are the types of content blocks you can create:

- **Launch blocks** can contain only one item. When Dashboard opens, the item automatically launches.

  A launch block that is created to display a report in EXL2K, EXCEL, or DOC formats should use scroll bars instead of scroll buttons.

- **List blocks** can contain many items from one or more domains. The items can be from any folder in any domain to which a user has access. Users can run a report or access an Internet resource by clicking a hyperlink from the list.

- **Folder blocks** list the entire contents of a folder (including its subfolders) that have been created in Managed Reporting. Only one folder can be added to a folder block. When the contents of a Managed Reporting folder are modified outside of Dashboard, the folder block in Dashboard automatically updates to reflect any changes. You can add folders from the Standard Reports, My Reports, and Shared Reports folders.
- **Output blocks** may or may not contain default content. Reports, graphs, or Web pages can be displayed in output blocks. When a report is run or an Internet resource is accessed, the report output or Web page appears in the output block. This is useful because a new browser window does not open each time a report or graph is executed, or a Web page is launched from a Domain Tree, Role Tree, List, or Folder block. Instead, the output block refreshes with the new content.

  When you create an output block, scrolling options are not available. Scroll bars appear when necessary.
- **Tree blocks** provide a way to add a Domain Tree to a Public View or Group View page. The Domain Tree is displayed without the sidebar frame.
- **Favorites blocks** list the reports, graphs, hyperlinks, and any other item type (except reporting objects) that you want to quickly and easily access.
- **Watch list blocks** add the Report Library Watch List interface to a page. The watch list block type is available only when the Library tab is selected from the Add Block page.

Note: Some Web sites bring their page to the top of a frameset when launched and take over the browser session. When these sites are opened in a launch or output block, Dashboard content is lost. It is recommended that these types of Web sites not be selected for a launch or output block.

When you add items to a content block, you can use the Domain Search from the Add Block and Edit Block windows. For details, see *How to Add Items to a Content Block Using Domain Search* on page 85.

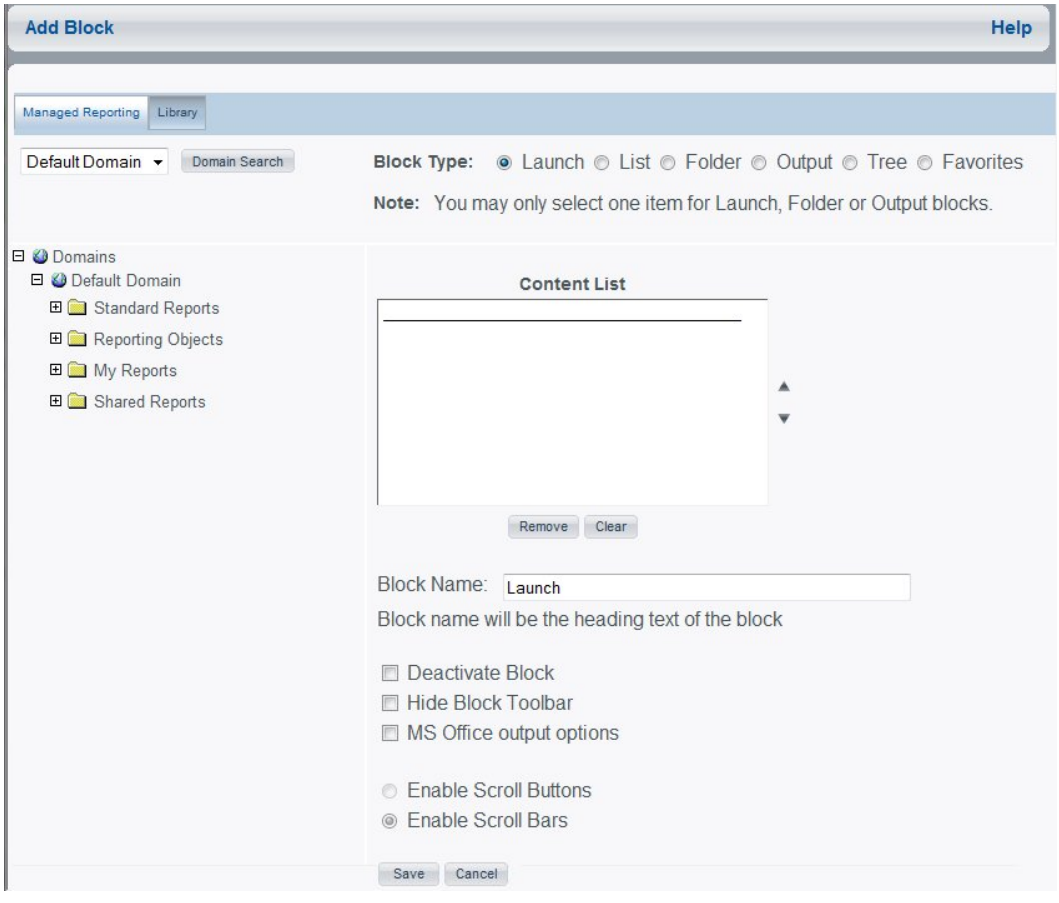
Across the top of the Add Block window is a drop-down menu for selecting a domain, a Domain Search button, and block type option buttons to select either a Launch, List, Folder, Output, Tree, or Favorites block. At the left side of the window is a tree view of the selected domain. The right side of the window contains the Content List showing selected items with up and down arrows to the right, and Remove and Clear buttons at the bottom.

Below the Content List is a text box for entering the Block Name, and a series of check boxes that are available to enable the following functionality:

- Deactivate Block
- Lock Block (available to administrators only)
- Hide Block Toolbar

- MS Office output options
- Automatic Block Refresh (available to administrators only)

There are also option buttons to enable Scroll Buttons or Scroll Bars, and Save and Cancel buttons. The following image shows the Add Block window.



Procedure: How to Add a Content Block

1. From the Content window, select the content page in which to add content. If you need to add content pages, see *How to Create Content Pages* on page 81.
2. Click *Add Block*.

   The Add Block window opens.
3. Select the desired Block Type option.

4. Select a domain from the drop-down list. You can also add items to a content block using Domain Search. See *How to Add Items to a Content Block Using Domain Search* on page 85.

   Note: If you are creating an Output block, adding domain items is optional because Output blocks do not require default output.

5. Click *Submit* to retrieve the contents of the selected domain.
6. Expand the domain folders you want to select items from by clicking the plus sign (+) located next to the folder icon.

   Note: Only one report in EXL2K PIVOT format can be active at a time. Therefore, it is not recommended to place output of this format type into a content block. Subsequent attempts to execute a report in this format will fail, since the original report will still be active.

7. Select the items in the domain folders to populate the Content List.

   If you are creating a List block you can position the items using the arrows next to the Content List.

8. Accept the default block name or change the name in the Block Name text box.

   Note:

   - If you name your content block before you select content, the block name may be overwritten with the name of the Domain item you select. You can change the name after selecting content.
   - If you create an empty launch, list, or folder block and enter a block name, when you click Save, the name is overwritten with Empty Block. This occurs only with launch, list, and folder blocks. Output blocks retain the name you enter.

9. Select the *Enable Scroll Buttons* or *Enable Scroll Bar* option button.
10. Click *Save* when you have finished selecting the content for your block.

Procedure: How to Add Items to a Content Block Using Domain Search

1. From the Add Block or Edit Block window, click *Domain Search*.
2. Enter the criteria for your search and then click *Search*.
3. From the results on the right side of the window, click an item to add it to your content block.

   View your content block to verify the items you have added.

Removing a Content Block

How to:

Remove a Content Block

From the Content window, you can remove a content block. Note that you can remove more than one content block at a time.

Procedure: **How to Remove a Content Block**

1. From the Content window, select the content page where the content block is located.
2. Select the check box next to each of the block(s) you want to remove.
3. Click *Remove*.
   An alert window appears to confirm the removal.
4. Click *OK*.

Editing a Content Block

In this section:

Selecting Scrolling Options

Hiding the Toolbar in a Content Block

How to:

Change the Content Block Type

Remove Items From a Block

Change the Block Contents

Change the Name of a Content Block

Temporarily Remove a Content Block

From the Edit Block window, you can edit existing content blocks. When you select the edit option, the name of the content block and its attributes appear in the Edit Block window. You can edit the block type, block contents, block name, scrolling options, and several optional features.

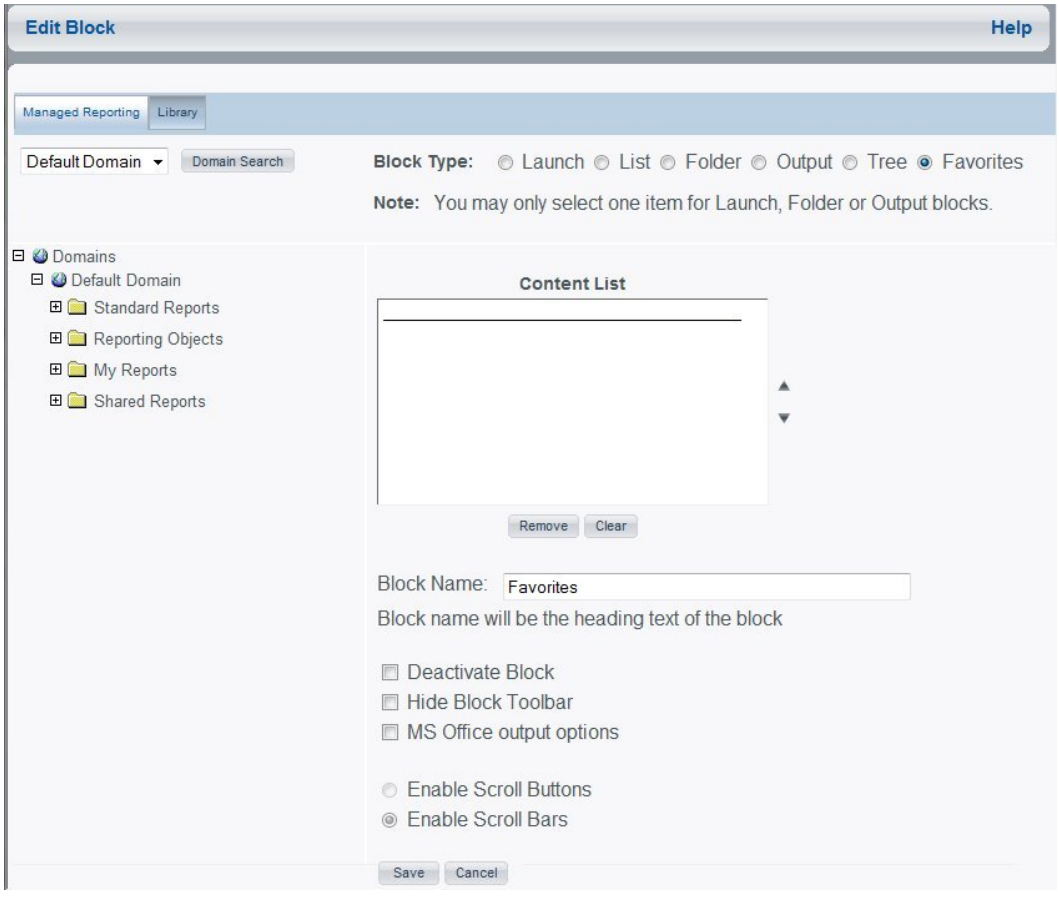
You can also deactivate a content block. This is useful when you want to temporarily remove a content block from a Dashboard view. When a content block is deactivated, it is designated in the Content window with a red icon. A green icon designates an active content block.

Across the top of the Edit Block window is a drop-down menu for selecting a domain, a Domain Search button, and block type option buttons to select either a Launch, List, Folder, Output, Tree, or Favorites block. At the left side of the window is a tree view of the selected domain. The right side of the window contains the Content List showing selected items with up and down arrows to the right, and Remove and Clear buttons at the bottom.

Below the Content List is a text box for entering the Block Name, and a series of check boxes that are available to enable the following functionality:

- Deactivate Block
- Lock Block (available to administrators only)
- Hide Block Toolbar
- MS Office output options
- Automatic Block Refresh (available to administrators only)

There are also option buttons to enable Scroll Buttons or Scroll Bars, and Save and Cancel buttons. The following image shows the Edit Block window.



Procedure: How to Change the Content Block Type

1. From the Content window, select the content page where the content block is located.
2. Select the check box next to the block you want to edit.
3. Click *Edit Block*.
   The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking the *Edit* icon for the content block you wish to edit.
4. Select the desired Block Type option.

5. Click *Save*.

   Note: When you change the content block type, all of the items in the block are removed and the block name clears.

Procedure: How to Remove Items From a Block

1. From the Content window, select the content page where the block is located.
2. Select the check box next to the list block you want to edit.
3. Click *Edit Block*.
   The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking the *Edit* icon for the content block you wish to edit.
4. In the Content List, select the item you want to remove.
5. Click *Remove*.
6. Click *Save*.

Procedure: How to Change the Block Contents

1. From the Content window, select the content page where the block is located.
2. Select the check box next to the block you want to edit.
3. Click *Edit Block*.
   The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking the *Edit* icon for the content block you wish to edit.
4. Select a domain from the drop-down list and click *Submit*.
   You can also add items to a content block using Domain Search. For details, see *How to Add Items to a Content Block Using Domain Search* on page 85.
5. Navigate to the item you want to add in the Domain Tree.
6. Click the item or folder to add it to the Content List.

   Note: The block name may be overwritten with the name of the Domain item you select. You can change the block name after selecting content.
7. Click *Save*.

Procedure: How to Change the Name of a Content Block

1. From the Content window, select the content page where the content block is located.
2. Select the check box next to the block you want to edit.
3. Click *Edit Block*.
   The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking the *Edit* icon for the content block you wish to edit.
4. In the Block Name text box, type the new name for the block.
   This must be a unique name within Dashboard.
5. Click *Save*.

Procedure: How to Temporarily Remove a Content Block

1. From the Content window, select the content page where the content block is located.
2. Select the check box next to the block you want to edit.
3. Click *Edit Block*.
   The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking the *Edit* icon for the content block you wish to edit.
4. Select the *Deactivate Block* check box.
5. Click *Save*.

Selecting Scrolling Options

How to:

Select Scrolling Options for a Content Block

You can select either scroll buttons or scroll bars for launch blocks, list blocks, and folder blocks. Scroll buttons cannot be selected for output blocks and launch blocks that launch Web pages. Output blocks automatically contain scroll bars when necessary.

When scroll buttons are enabled, up, down, left, and right arrows display in the toolbar allowing you to navigate the content block. Up and down arrows display for all content block types. Left and right arrows only display for launch blocks. In folder blocks and list blocks information automatically wraps, therefore eliminating the need to scroll to the left or right.

When scroll bars are enabled, scroll bars display when content exists that cannot be viewed within the displayed window. When this option is selected, scroll buttons do not display in the toolbar.

Note: A launch block that is created to display a report in EXL2K, EXCEL, or DOC formats should use scroll bars instead of scroll buttons.

Procedure: How to Select Scrolling Options for a Content Block

1. From the Content window, select the content block you want to add scrolling options for and click *Edit Block*.

   The Edit Block window opens.

   You can also access the Edit Block window directly from Dashboard by clicking the *Edit* icon for the content block you wish to edit.

2. Select the *Enable Scroll Buttons* or *Enable Scroll Bars* option button.
3. Click *Save*.

Hiding the Toolbar in a Content Block

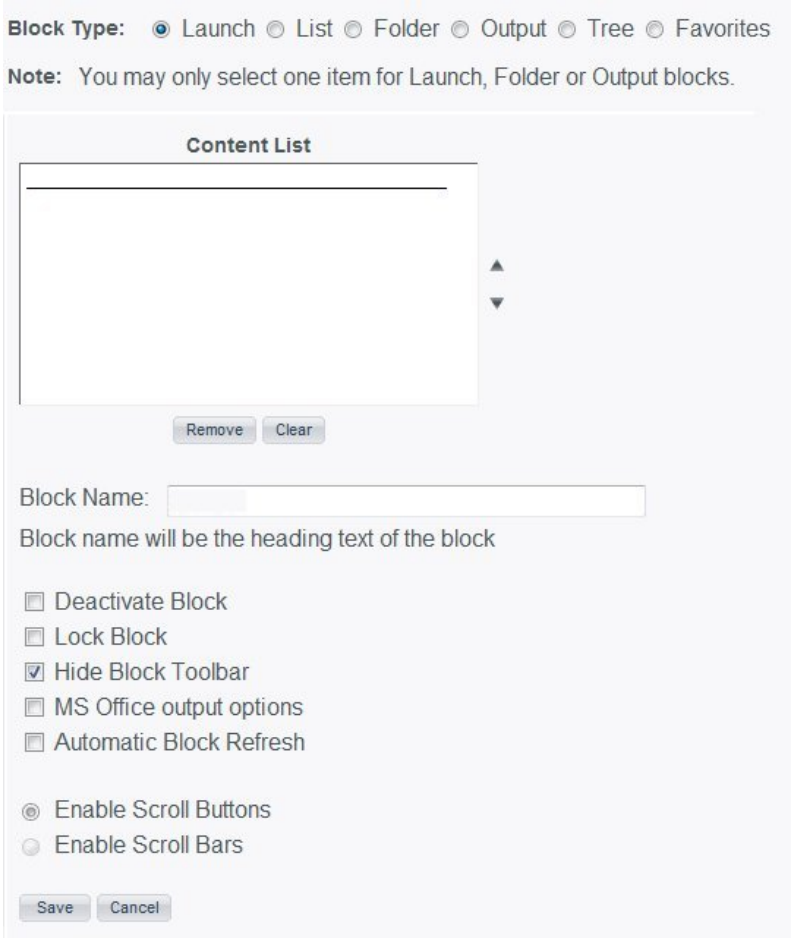
How to:

Hide the Toolbar in a Content Block

When you hide the content block toolbar, automatic block refresh functionality is not available. Additionally, scrolling is automatically set to use scroll bars because scroll buttons are not available when the block toolbar is hidden.

Procedure: How to Hide the Toolbar in a Content Block

1. From the Add Block or Edit Block window, select the *Hide Block Toolbar* check box.



Note: The Lock Block and Automatic Block Refresh check boxes are available to administrators only.

2. Click *Save*.

Selecting Content Layout

How to:

Add a Column

Adjust Column Width

From the Layout window, you can change the content block layout. You can select a different layout for each content page. When selecting the layout for your content page, you can:

- Add and remove columns.
- Specify column width.
- Rearrange column order.

The following image shows a sample Layout window. There are list boxes for the contents of Column 1 and Column 2 with up, down, right, and left arrows. The Column 1 list box includes a text box, a plus control (+), and a minus (-) control to adjust column width. There are buttons to Add Column, Remove Column, Move Column Left, and Move Column Right, as well a Content button to return to the Content window.

Note: If you remove all content blocks from a column, the column is not automatically removed from the Dashboard View. If there are no content blocks in a column, empty space is shown in the Dashboard View.

Procedure: How to Add a Column

1. From the Content window, select a content page and then click *Page Layout*.
2. Click *Add Column*. To move:
   - Items from one column to another, highlight the item and use the left and right arrows between the columns.
   - The position of a column, select the column and click *Move Column Left* or *Move Column Right*.
3. Click *Content* to return to the Content window.

Procedure: How to Adjust Column Width

1. From the Content window, select a content page and click *Page Layout*.
2. Click the plus (+) or minus (-) signs in the column to adjust column width.

   Note that you cannot adjust the width for the last column. Since column width total must equal 100%, the last column is always the remainder of all the other columns. For example, if you have 3 columns and column 1 is 50% and column 2 is 25%, column 3 is automatically set to 25%.

   Note: If you make your content blocks too small, the pop-up menu may not fully display.
3. Click *Content* to return to the Content window.

4 Using the Deferred Report Status Interface

The following topics provide an overview of the Deferred Report Status Interface including a detailed description of its appearance and functions. Specific procedures guide you through viewing, saving and deleting reports, deleting deferred reports that are being processed but are not yet complete, and reviewing parameters for reports containing amper variables.

Topics:

- Introducing the Deferred Report Status Interface
- Deferred Report Status Interface Features

Introducing the Deferred Report Status Interface

The Deferred Report Status Interface enables you to obtain information about deferred reports. From this Interface, you can perform the following actions on a deferred report:

- Sort deferred report output by date, description, domain, and server ID.
- View deferred report output.
- Delete a deferred report from the WebFOCUS Reporting Server.
- Save the report output as a My Report.
- Review or change parameters associated with a deferred report.
- View the number of days remaining prior to expiration (deletion) on the server.
- Terminate a deferred request that is in the deferred report queue.
- Terminate a deferred report that is running.
- Delete all expired, unknown, completed, running, and queued tickets.

You can access the Deferred Status Report Interface from:

- **Developer Studio**, by selecting the *Deferred Status* icon in the toolbar.
- **Dashboard**, by selecting the banner link *Utilities*, then *Deferred Report Status*.

Deferred Report Status Interface Features

In this section:

Sort Controls for the Deferred Report Status Interface
Deferred Report Status
Deferred Report Expiration Setting
Saved Deferred Output Subject to Temporary Expiration
Special Behavior for Sorting by WebFOCUS Reporting Server User ID
Setting the Automatic Refresh Interval
Viewing Deferred Reports
Reviewing Deferred Report Parameters
Saving Deferred Reports
Deleting Tickets for All Report Status Types
Deferred Status Delete Confirmation Messages

The Deferred Report Status Interface includes:

- A banner at the top of the window that lists the date and time of the request.
- A gray toolbar below the banner that contains Refresh and Help options, a Sort By drop-down list to select sort values, a sort order button to toggle between ascending and descending order, and a Delete drop-down list. The Delete drop-down list has options to delete All, All Completed, All Running, All Queued, All Expired, or All Unknown reports, depending on which report status types exist in the Interface.
- The status of each report within the Interface.

Sort Controls for the Deferred Report Status Interface

The sorting feature pertains to the entire report. When the default sort value (Date/Time Submitted) is changed, the new primary sort becomes your choice, but the secondary sort is always fixed as Date/Time Submitted. To resort the list, select the Sort by option:

- Date (default)
- Description
- Domain

- Server ID (This does not actually appear as a column. For more information, see *Special Behavior for Sorting by WebFOCUS Reporting Server User ID* on page 102.)

You can optionally change the sort order (ascending or descending) by clicking the Reverse Sort Order button, which toggles between A to Z and Z to A.

Note: When the sort value is Date, the sort order option A to Z means from new to old and not alphabetical from A to Z.

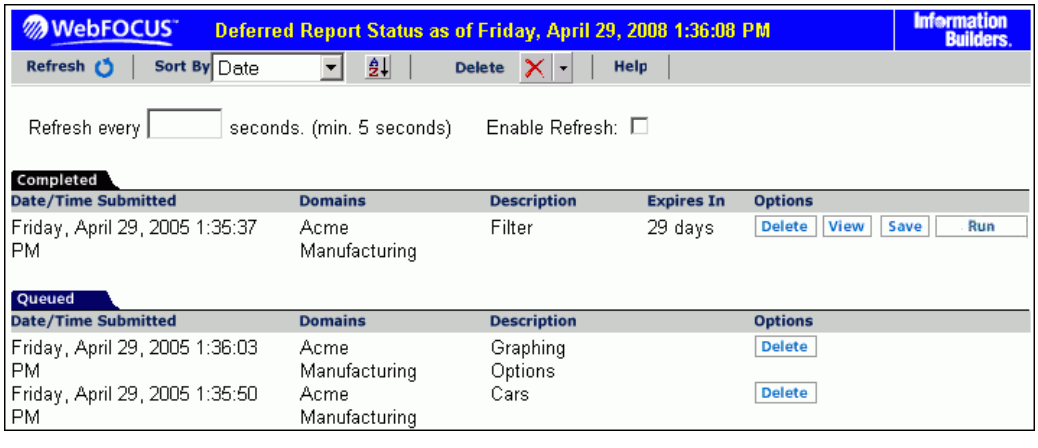
To see the results of the new sort options, click *Refresh*.

Deferred Report Status

The status of deferred requests are organized under the following sections within the Interface:

- **Completed.** Indicates that the Deferred Receipt request has finished processing.
- **Running.** Indicates that the Deferred Receipt request is processing.
- **Queued.** Indicates that the Deferred Receipt request is queued for processing.
- **Unknown.** Indicates that the Deferred Receipt request cannot be identified. This can occur when the file containing the deferred report results cannot be found. For more information, see *Deferred Report Expiration Setting* on page 101.

The following image shows a sample Deferred Report Status window with one completed report and two Queued reports.



Column headings provide information about the Standard Report including the date and time the Standard Report was submitted, the domain of origin, a description of the report (the report name), an expiration indicator, and an Options heading for options within the Deferred Report Status Interface.

When you select the Deferred Status option, the status for all the deferred requests submitted by your Managed Reporting user ID is retrieved. Depending on how Managed Reporting is configured, deferred status may be coming from multiple WebFOCUS Reporting Servers on various platforms. If credentials are required for the connections, you are prompted by the WebFOCUS Dynamic Server System Signon feature. You can view the status of all the deferred requests submitted by your Managed Reporting user ID, but can only delete, view, save, stop, or review parameters for deferred requests submitted with an identical WebFOCUS Reporting Server user ID.

Caution: Sharing Managed Reporting user IDs is not recommended. For more information, see *Considerations When Logging On to Dashboard* on page 21.

The options available in the Deferred Report Status Interface are based upon the status of the report request and security validation. You can perform various functions by clicking the buttons under Options:

- **Delete.** Available for all report status types. The Delete option deletes the deferred request according to the report status, as follows:
  - **Queued.** When a deferred request is listed in the Queued tab, the Delete option removes the deferred report from the WebFOCUS Reporting Server and deletes the deferred request ticket from the WebFOCUS Repository.
  - **Unknown.** When a deferred request is listed in the Unknown tab, the Delete option deletes the deferred request ticket from the WebFOCUS Repository.
  - **Completed.** When a deferred request is listed in the Completed tab, the Delete option removes the report from the window, deletes the deferred report results from the WebFOCUS Reporting Server, and deletes the deferred request ticket from the WebFOCUS Repository.
  - **Running.** When a deferred request is listed in the Running tab, the Delete option deletes the deferred request ticket from the WebFOCUS Repository and cancels the job on the WebFOCUS Reporting Server.

  Note: The Delete drop-down list in the toolbar at the top of the Interface provides options to delete All, All Completed, All Running, All Queued, All Expired, or All Unknown reports, depending on which report status types exist in the Interface.
- **View.** Available when the report status is Completed.

  The View option displays the completed report in a new browser session, or the report format may result in the opening of a Windows dialog box that prompts you to save the report to disk or open the report within an application (such as Microsoft® Excel®, Microsoft® Word, or Adobe® Acrobat®).

- **Save.** Available when the report status is Completed.

  The Save option saves the My Report or Custom Report to a special folder, Deferred Reports Output, in the Domains My Reports tab. The description of the My Report or Custom Report is the description that appears in the Deferred Report Status Interface, along with the date and time the My Report or Custom Report was created.

  Note: This option does not appear for users with the User role. Users with the User role cannot save report results to the Managed Reporting Repository.

- **Run.** Available for reports without parameters when the report status is completed or queued. The Run option runs the report deferred again.

- **Parameters.** Available for reports with parameters when the report status is completed or queued. The Parameters option allows you to review or change report variables. Changing report variables generates a new report that does not overwrite the original request.

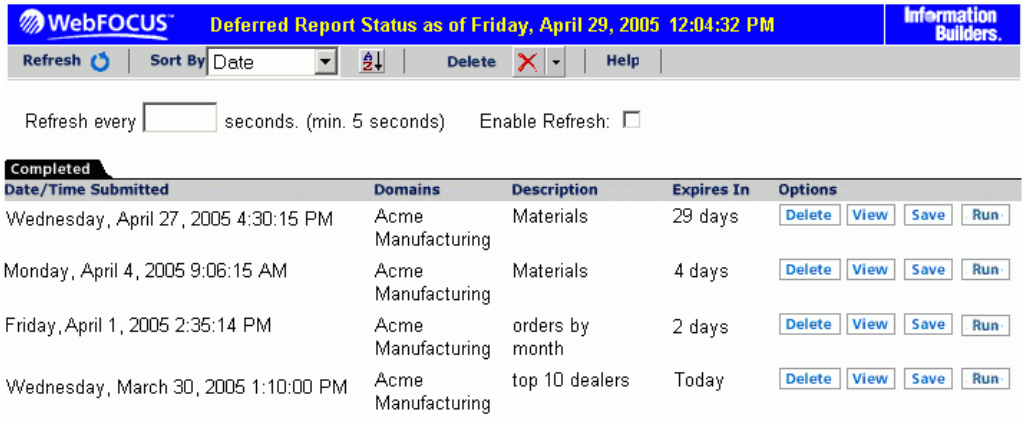
  Note: Deferred reports run from within any report development tool do not have an option to view or change amper variable parameter values in the Deferred Status Interface window.

Under certain circumstances, WebFOCUS is unable to submit the request to run in deferred mode. This can occur, for example, when the WebFOCUS Reporting Server is unavailable. When WebFOCUS is unable to submit a deferred request, a Deferred Receipt Notification window opens, notifying you of the failure.

Deferred Report Expiration Setting

The number of days until expiration appears next to each report. On the last day, the value Today appears.

The following image shows the results of a deferred status request, run on the afternoon of Friday, April 29. (The current date appears in the status bar at the top of the page.) Each report is listed with the time remaining before it is deleted from the WebFOCUS Reporting Server. The time remaining is based on 24-hour intervals (rather than whole days), beginning with the time that the report was submitted. For example, the last report shown on the list will be deleted shortly after 1:10 pm on April 30, not at midnight on April 29.



If a deferred report is not saved or deleted prior to its expiration, the output is automatically deleted from the WebFOCUS Reporting Server dfm_dir directory and the deferred report is moved to the Unknown status tab in the Deferred Report Status Interface. From here, you can only delete the orphaned report.

If deferred output expiration is not configured on your WebFOCUS Reporting Server, then the value Never appears next to each report under the Expires In column.

Note: This setting does not affect deferred output saved to your My Reports area.

Saved Deferred Output Subject to Temporary Expiration

Saved Deferred Reports that utilize WebFOCUS features that create temporary files, such as OLAP, On-demand paging, and redirected formats are subject to expiration as defined by the WebFOCUS Client parameter, EXPIRE_REPORTS (located in cgivars.wfs). See the *WebFOCUS Security and Administration* manual for information on the EXPIRE_REPORTS parameter that controls temporary file expiration and the mime.wfs file that defines reports formats and whether they use redirection.

Special Behavior for Sorting by WebFOCUS Reporting Server User ID

Sorting by WebFOCUS Reporting Server user ID enables you to bring deferred reports you want to interact with to the top of the list. At the same time, the deferred reports that you cannot interact with are pushed to the bottom of the list and sorted alphabetically.

This is a special sort. Regardless of the setting for a>z or z>a when the sort value is Server ID, deferred reports for the current ID appear at the top. These are followed, in sort order, by deferred reports for other Server IDs, if any exist. The Server ID automatically appears in the Options column.

Example: Sorting by Server ID

You may see deferred reports listed that you are not allowed to interact with if they:

- Are inconsistent with the case that you use when you log on with your WebFOCUS Reporting Server ID.
- Connect to different WebFOCUS Reporting Servers, or to the same WebFOCUS Reporting Server at different times with different WebFOCUS Reporting Server user IDs.

The following image shows a sample Deferred Report Status window with three reports that have no options for interaction.

Setting the Automatic Refresh Interval

How to:

Set the Automatic Refresh Interval

You can set the automatic refresh interval to any value. The default is 5 seconds and there is no maximum value.

Procedure: How to Set the Automatic Refresh Interval

1. Enter a time interval (in seconds) in the input box below the gray toolbar.

   The default value is 5 seconds. There is no maximum value.

2. Check the box to enable automatic refresh.

Viewing Deferred Reports

How to:

View a Deferred Status Report

You must access the Deferred Report Status Interface to view deferred reports.

Procedure: How to View a Deferred Status Report

1. Open the Deferred Report Status Interface.
2. To view the output of a deferred report:
   a. Locate the report description under the Completed tab.
   b. Click *View*, under the Options column, to view the report.

      The output appears in a new window.

3. The Deferred Report Status Interface remains open until closed.
   a. To return to the Deferred Report Status Interface, close or minimize the report output window.
   b. To return to your reporting environment, close or minimize the report output window, then close the Deferred Report Status Interface.
4. Click *Refresh* to obtain the most current status of deferred requests.

Reviewing Deferred Report Parameters

How to:

Retrieve Deferred Request Parameters

The Deferred Report Status Interface enables you to retrieve parameters submitted with a deferred request. You access parameters by opening the Deferred Report Status Interface and clicking the parameters button for the report of your choice. The parameters button is not available when the deferred request is submitted from within a report development tool such as Report Assistant or Graph Assistant.

You can also change the parameters associated with a report and submit the report to run deferred with the new parameters you specified. WebFOCUS generates your report again using the new parameters and does not overwrite your original report request.

Procedure: How to Retrieve Deferred Request Parameters

1. Open the Deferred Report Status Interface.
2. In the Completed or Unknown tabs, identify the report containing the parameters to review.
3. Click *Parameter* under the Options column heading.

   An intermediate window (HTML form) opens.

   a. To review and accept the original parameters, close the browser window.

   b. To change the parameters, enter a new value in the input box.

      The original request runs in addition to the newly submitted request.

4. Click *Submit*.

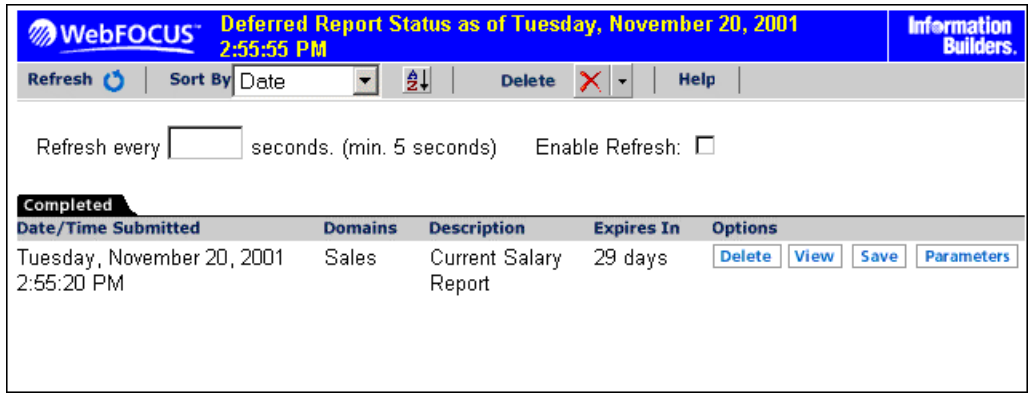
   The Deferred Report Notification window opens.

5. Close the Deferred Report Notification window to return to the Deferred Report Status Interface.

Example: Using Deferred Report Status Interface Options

In the following example, you will manipulate a report called Current Salary Report that has been submitted as a deferred request. This example is based on a report developed using the Employee Master File and is intended to offer a practical demonstration of some of the options available in the Deferred Report Status Interface. You should note that an Administrator can develop a similar file for training purposes.

1. Open the Deferred Report Status Interface.
2. Under the Completed tab, locate *Current Salary Report*, as shown in the following image.



3. Under the Options column heading, click *Parameters*.

   An intermediate window (HTML form) opens.
4. In the input box, enter the value "A17", and click *Submit*.

   The Deferred Report Notification window opens confirming receipt of your request.
5. Close the Deferred Report Notification window to return to the Deferred Report Status Interface.

To view Current Salary Report:

1. Under the Completed tab, locate *Current Salary Report* again.
2. Click *View*.

   WebFOCUS displays Current Salary Report in a separate browser window, as shown in the following image.

PAGE 1

EMP_ID	LAST_NAME	FIRST_NAME	CURR_SAL	EFFECT_DATE	JOBCODE
119329144	BANNING	JOHN	$100,000.00	83/01/01	A17
818692173	CROSS	BARBARA	$222,284.00	83/05/01	A17

3. Close the window to return to the Deferred Report Status Interface.
4. Under the Options column, click *Save*.

   WebFOCUS saves Current Salary Report to the Managed Reporting Repository as a My Report.

5. Close the Deferred Report Status Interface to return to your reporting environment.

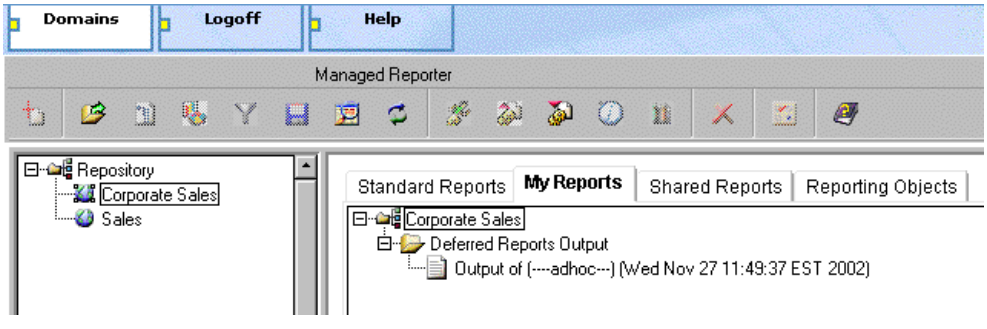
Saving Deferred Reports

How to:

Save a Deferred Report

You can save Deferred Receipt reports to the Managed Reporting Repository, if your administrator has authorized you to save reports. The report output is saved to your directory in the Managed Reporting Repository by domain, if the domain is not restricted. If the domain is restricted, you can save the report output to any other domain that you are authorize to save to and that is not restricted. When your deferred report is saved to the Managed Reporting Repository, it is removed from the Deferred Report Status Interface.

When you save a deferred report, a new group folder (Deferred Reports Output) is created under the My Reports tab within the Domain of origin, as shown in the following image. There is one group folder, Deferred Reports Output, for each domain. WebFOCUS lists your saved deferred reports (including Custom Reports) under the Deferred Reports Output group folder and adds "Output of" as well as the date and time the My Report or Custom Report was saved to the report name.

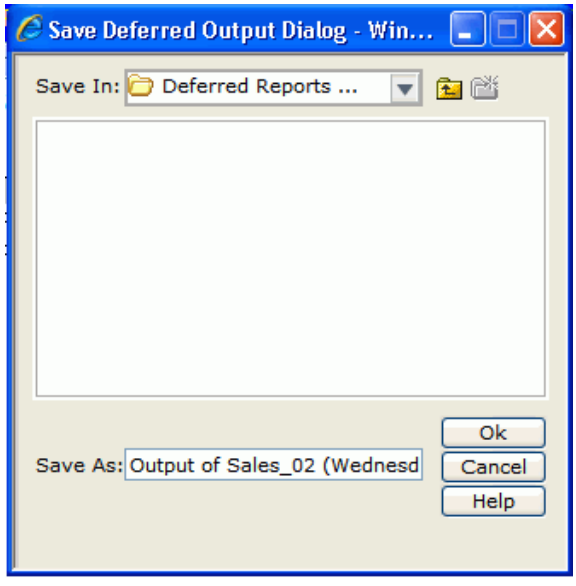


Procedure: How to Save a Deferred Report

1. Open the Deferred Report Status Interface.
2. Under the Completed tab, locate the report you want to save.
3. Under the Options column, click *Save* located to the right of the deferred report description.

   Note: Users with Run-only and User roles will not see the Save button.

The Saved Deferred Output Dialog box opens, as shown in the following image.



4. From the Save In drop-down menu, you can navigate to the domain, My Reports folder, and then the Deferred Output folder where you want to save the report output.

   Note:

   - The Save In drop down menu is a list of domains that you are authorized to save to. The Save In value that appears when the Save Deferred Output Dialog box initially opens is the Deferred Reports folder under the domain where you ran the report.

     IMAGE OF LIST

   - Some domains may be restricted and not allow you to save My Reports. In this case, the OK button is not available to you (it is greyed out). When you select a domain where you are authorized to save My Reports, then the OK button is available for selection.

     IMAGE OF RESTRICTED DOMAIN

5. In the *Save As* field, either keep the name that appears in this field or type a new name for the saved report output. If you type an existing file name, you are asked to confirm that you want to replace the existing file.
6. Click OK.

   WebFOCUS saves the deferred report results, including deferred Custom Reports, to your My Reports tab in the Deferred Output group folder.

To return to your reporting environment, close the Deferred Report Status Interface.

Deleting Tickets for All Report Status Types

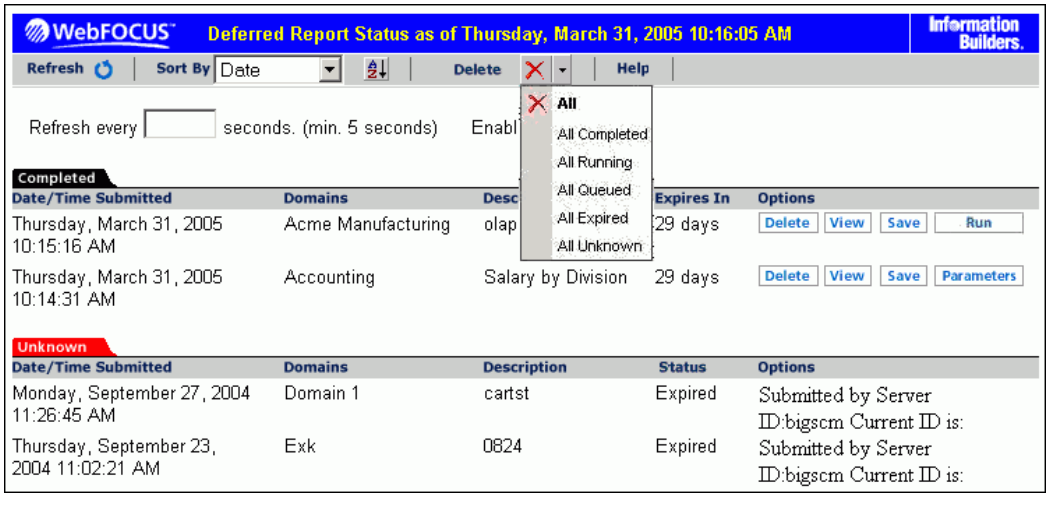
How to:

Delete Tickets for All Report Status Types

From the Deferred Status Interface, you can delete tickets for all report status types using the Delete drop-down list located in the toolbar at the top of the Interface. The drop-down list provides options to delete All, All Completed, All Running, All Queued, All Expired, and All Unknown reports, but only when one or more reports exist for that status type in the Deferred Status Interface. If a report status type is not displayed in the Interface, the corresponding status option does not appear in the Delete drop-down list.

You can also delete individual tickets using the Delete button located in the Options column next to each report.

The following image shows the Deferred Status Interface with the Delete drop-down list expanded showing the available options.



For unknown tickets, the status column shows:

- *Expired* if the report has expired and is no longer stored on the Server.
- *Unknown* for cases where the status cannot be determined, including situations where the server is not running so a connection could not be made to determine the status.

  Note: For Unknown reports, the Options column displays the Server ID that submitted the report along with the Current ID.

Procedure: How to Delete Tickets for All Report Status Types

1. Open the Deferred Status Interface.
2. Click the down-arrow next to Delete and select one of the following from the drop-down list that opens:
   - *All*
   - *Completed*
   - *Running*
   - *Queued*
   - *Expired*
   - *Unknown*

   You are prompted to confirm the deletion.
3. Click *OK* to delete all tickets for the selected status type or click *Cancel* to cancel the request.

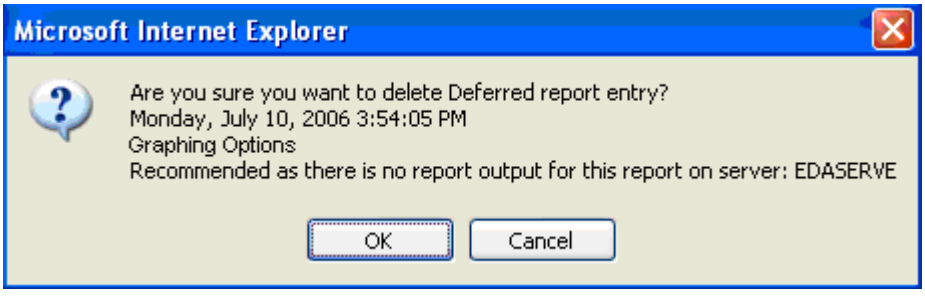
Deferred Status Delete Confirmation Messages

The Deferred Status Interface presents the user with a delete confirmation message before deleting a deferred report that is in Completed, Running, or Queued states. (A confirmation message is already displayed for deferred reports in Unknown status.)

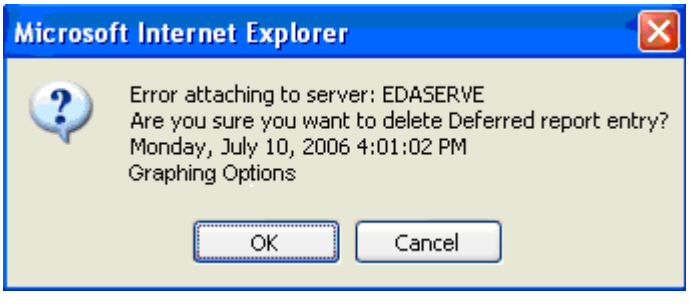
When you click the delete button from the Deferred Status page, you are prompted to confirm the delete before the deferred report is actually deleted. A similar confirmation message is used for all deferred reports, but the message varies depending on the conditions.

The following list shows confirmation messages and the associated conditions:

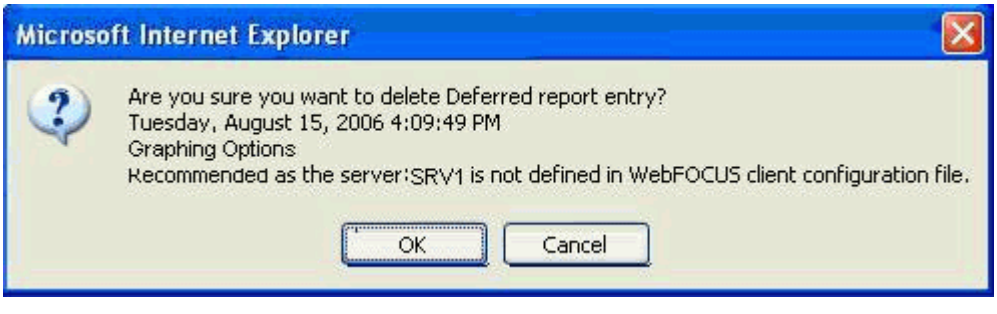
- If the report is expired or was deleted from the server, the message recommends deletion and indicates that there is no report output on the specific WebFOCUS server, as shown in the following image.


Microsoft Internet Explorer
Are you sure you want to delete Deferred report entry?
Monday, July 10, 2006 3:54:05 PM
Graphing Options
Recommended as there is no report output for this report on server: EDASERVE
OK
Cancel

- If the WebFOCUS server is unavailable, the message indicates there is an error attaching to the specific WebFOCUS server, as shown in the following image.


Microsoft Internet Explorer
Error attaching to server: EDASERVE
Are you sure you want to delete Deferred report entry?
Monday, July 10, 2006 4:01:02 PM
Graphing Options
OK
Cancel

- If there is no entry for the server in the WebFOCUS client configuration, the message recommends deletion and indicates that the specific WebFOCUS server is not defined in the WebFOCUS client configuration file, as shown in the following image.


Microsoft Internet Explorer
Are you sure you want to delete Deferred report entry?
Tuesday, August 15, 2006 4:09:49 PM
Graphing Options
Recommended as the server:SRV1 is not defined in WebFOCUS client configuration file.
OK
Cancel

Each of the deletion confirmation messages also displays the date and time the deferred report was submitted, and the description that is displayed in the Deferred Status Interface.

5 Analyzing Data in an OLAP Report

WebFOCUS Online Analytical Processing (OLAP) enables you to view and quickly analyze data in order to make critical business decisions.

Topics:

- We Do It Every Day: Typical Web Query
- OLAP Reporting Requirements
- Characteristics of an OLAP Report
- Three Ways of Working With OLAP Data
- Drilling Down On Dimensions and Measures
- Sorting Data
- Performing a Calculation on a Measure
- Limiting Data
- Visualizing Trends
- Displaying Graphs and Reports
- Controlling the Display of Measures in a Report
- Adding and Removing Dimensions
- Saving OLAP Reports
- Saving and Displaying OLAP Reports and Graphs in Other Formats

We Do It Every Day: Typical Web Query

In this section:

Running OLAP Examples

Suppose that you own a small business in New York and are exploring a partnership with a company in Oakland, California. You need to get to a Monday morning meeting. How do you go about arranging your flight?

Most likely, you go online.

First, you check available flights on the airline that holds your frequent flyer miles. You discover that your frequent flyer carrier requires a change of planes and you would prefer a direct flight, so you look at routes and fares for other airlines.

In New York, you can get to LaGuardia, JFK, and MacArthur airports on Long Island. In California, you can fly into Oakland or San Francisco.

While you would prefer to fly out on Sunday and return Tuesday morning, you could consider a Saturday flight to California and a return flight on the red-eye Monday night, if fares and schedules are better.

You begin your search by airline and then look at options for each departure point and destination, by day, time, and price.

Another approach is to start with an online consolidator, enter the times you can fly, and see what flights and fares are available.

There are a lot of variables to play with, but in a half hour you have done your research and can make a good decision based on all available factors.

The Web sites you access are designed to facilitate your queries. Various menus and selection panes make it easy to pursue each line of inquiry. Required and optional information is identified for you. You can move forward down a path of choices, backtrack and start down a different path, or resume the original path with different selections.

You need to keep track of the question you want to answer, but a well-designed site makes your investigation easy. For most of us, this process has become intuitive.

The same process works when analyzing the data in an OLAP-enabledWebFOCUS report.

Running OLAP Examples

You can run all of the examples in this chapter using several OLAP-enabled Standard Reports. If the reports are not already available in your sample repository, ask your Managed Reporting administrator to provide them for your use. There are 9 reports named olaprep1.fex through olaprep9.fex. and are located in the \ibinccen directory. If you have installed a non-English version of the 'ibincc' directory, you will need to install the English version (ibinccen) in order to access these files.

Each example indicates which Standard Report to run. After the report appears in your browser, you can perform the analytic task shown, or pursue your own line of inquiry.

Suppose that you are an analyst for the fictional Century Corporation, which manufactures electronics equipment. You need to determine which of the stores that sells your products had the highest sales in 2002, and whether there is a pattern in sales periods and/or best selling products that should be considered when planning manufacturing schedules and parts inventories.

You have created a base report that shows sales data only for 2002. You have also OLAP-enabled the report to permit quick analysis of the data.

1. Run the Standard Report *OLAPREP1*.

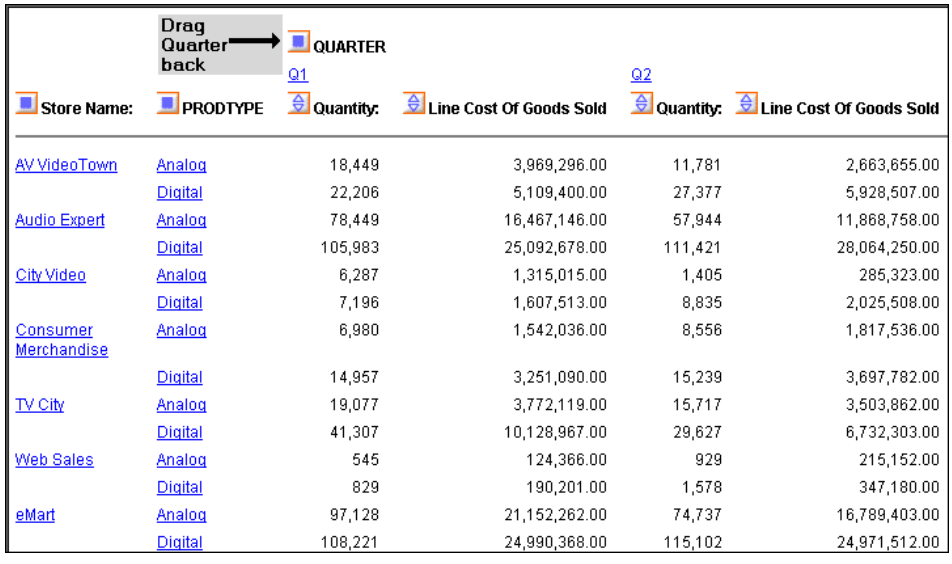
Before you begin your analysis, the OLAP report looks like the following image.

Drag Quarter up →	QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
	Q1	AV VideoTown	Analog	18,449	3,969,296.00
			Digital	22,206	5,109,400.00
		Audio Expert	Analog	78,449	16,467,146.00
			Digital	105,983	25,092,678.00
		City Video	Analog	6,287	1,315,015.00
			Digital	7,196	1,607,513.00
		Consumer Merchandise	Analog	6,980	1,542,036.00
			Digital	14,957	3,251,090.00
		TV City	Analog	19,077	3,772,119.00
			Digital	41,307	10,128,967.00
		Web Sales	Analog	545	124,366.00
			Digital	829	190,201.00
		eMart	Analog	97,128	21,152,262.00
			Digital	108,221	24,990,368.00
	Q2	AV VideoTown	Analog	11,781	2,663,655.00
			Digital	27,377	5,928,507.00
		Audio Expert	Analog	57,944	11,868,758.00
			Digital	111,421	28,064,250.00
		City Video	Analog	1,405	285,323.00

The Quarterly information is spread out over the left-most column. You can try a horizontal display to make comparison easier.

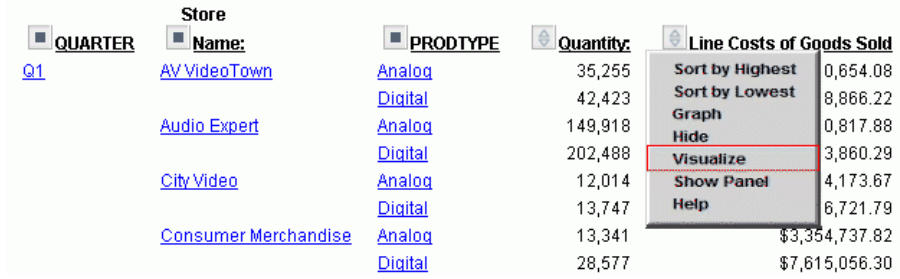
2. Drag and drop *QUARTER* above the report.

The report changes immediately and appears, as shown in the following image, across the top of the report with the Quantity and Line Cost of Goods Sold columns repeating for each quarter. The store information is more compact, but it is not easier to identify the store with the best sales record, so drag QUARTER back to its original position.



	Drag Quarter back →	QUARTER			
		Q1		Q2	
Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold	Quantity:	Line Cost Of Goods Sold
AV VideoTown	Analog	18,449	3,969,296.00	11,781	2,663,655.00
	Digital	22,206	5,109,400.00	27,377	5,928,507.00
Audio Expert	Analog	78,449	16,467,146.00	57,944	11,868,758.00
	Digital	105,983	25,092,678.00	111,421	28,064,250.00
City Video	Analog	6,287	1,315,015.00	1,405	285,323.00
	Digital	7,196	1,607,513.00	8,835	2,025,508.00
Consumer Merchandise	Analog	6,980	1,542,036.00	8,556	1,817,536.00
	Digital	14,957	3,251,090.00	15,239	3,697,782.00
TV City	Analog	19,077	3,772,119.00	15,717	3,503,862.00
	Digital	41,307	10,128,967.00	29,627	6,732,303.00
Web Sales	Analog	545	124,366.00	929	215,152.00
	Digital	829	190,201.00	1,578	347,180.00
eMart	Analog	97,128	21,152,262.00	74,737	16,789,403.00
	Digital	108,221	24,990,368.00	115,102	24,971,512.00

3. Right-click *Line Cost of Goods Sold* and choose *Visualize*, as shown in the following image. This applies a data visualization bar graph to each value in the column.



QUARTER	Store Name:	PRODTYPE	Quantity:	Line Costs of Goods Sold
Q1	AV VideoTown	Analog	35,255	0,654.08
		Digital	42,423	8,866.22
	Audio Expert	Analog	149,918	0,817.88
		Digital	202,488	3,860.29
	City Video	Analog	12,014	4,173.67
		Digital	13,747	6,721.79
	Consumer Merchandise	Analog	13,341	$3,354,737.82
		Digital	28,577	$7,615,056.30

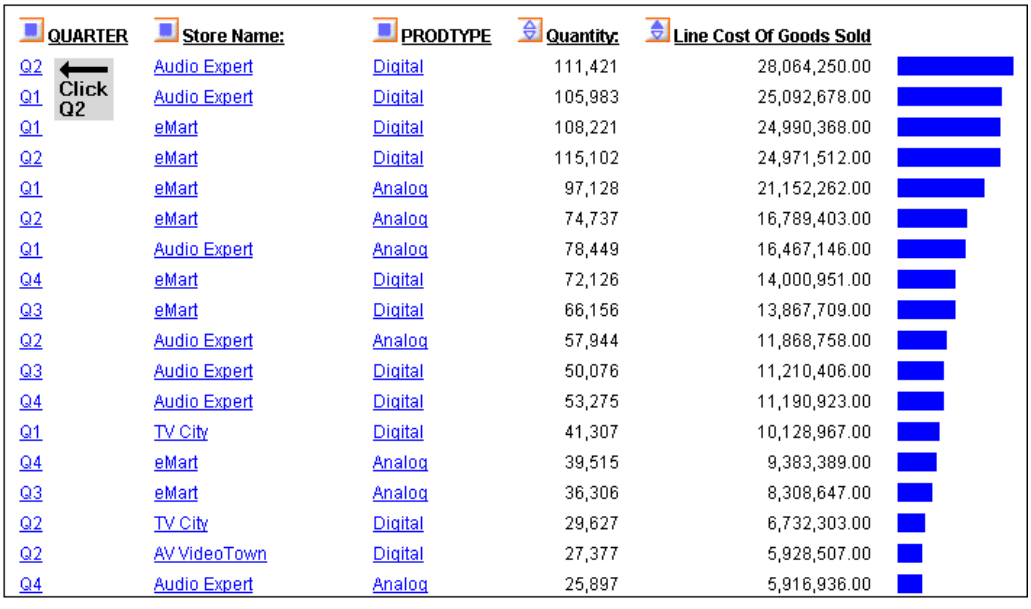
Note: The options available may vary, depending on your OLAP format settings. For more information, see *Setting OLAP Reporting Options* on page 122.

The display changes, as shown in the following image. The bar graphs still do not reveal a trend.

QUARTER	Store Name:	PRODTYPE	Quantity:	Line Costs of Goods Sold
Q1	AV VideoTown	Analog	35,255	$8,850,654.08
		Digital	42,423	$11,368,866.22
	Audio Expert	Analog	149,918	$36,160,817.88
		Digital	202,488	$55,513,860.29
	City Video	Analog	12,014	$2,934,173.67
		Digital	13,747	$3,576,721.79
	Consumer Merchandise	Analog	13,341	$3,354,737.82
		Digital	28,577	$7,615,056.30
	TV City	Analog	36,467	$8,401,966.46
		Digital	78,920	$22,653,221.65
	Web Sales	Analog	1,090	$359,785.82
		Digital	1,658	$556,750.75
	eMart	Analog	185,637	$46,482,367.45
		Digital	206,791	$55,576,175.93
Q2	AV VideoTown	Analog	22,525	$5,635,670.15
		Digital	52,314	$12,710,259.47
	Audio Expert	Analog	110,762	$25,053,803.36
		Digital	212,919	$59,768,889.15

4. Sort the data by highest value by either right-clicking *Line Cost of Goods Sold* and choosing *Sort by Highest*, or clicking the *Up* arrow (the tool tip reads *Sort LINE_COG highest to lowest*).

As shown in the following image, the report shows that Audio Expert has the highest sales in the digital product lines in Quarters 1 and 2, with eMart trailing slightly. Each value under the QUARTER, Store Name, and PRODTYPE column is hyperlinked for more details.

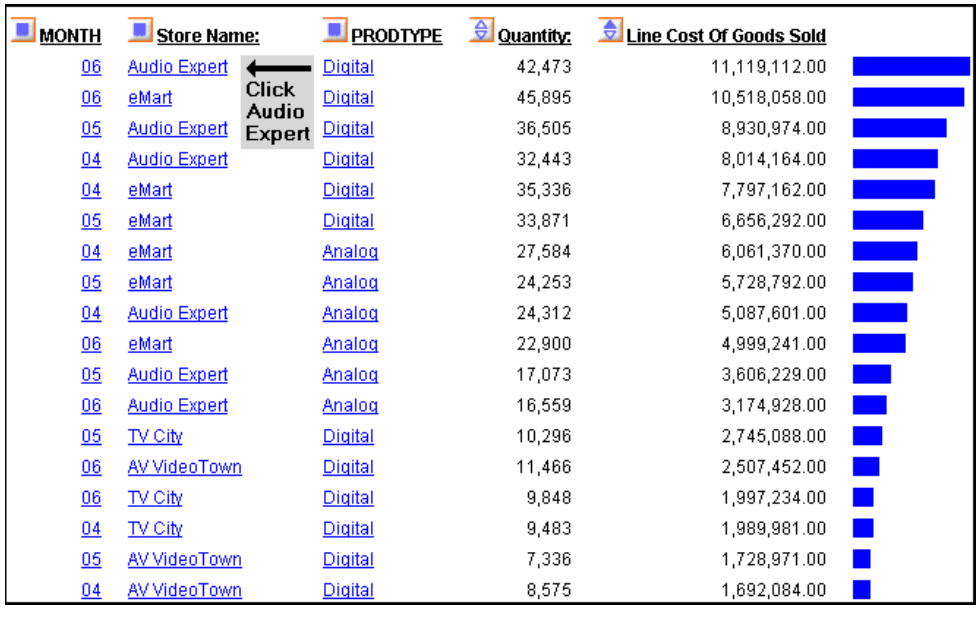


QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q2	Audio Expert	Digital	111,421	28,064,250.00
Q1	Audio Expert	Digital	105,983	25,092,678.00
Q1	eMart	Digital	108,221	24,990,368.00
Q2	eMart	Digital	115,102	24,971,512.00
Q1	eMart	Analog	97,128	21,152,262.00
Q2	eMart	Analog	74,737	16,789,403.00
Q1	Audio Expert	Analog	78,449	16,467,146.00
Q4	eMart	Digital	72,126	14,000,951.00
Q3	eMart	Digital	66,156	13,867,709.00
Q2	Audio Expert	Analog	57,944	11,868,758.00
Q3	Audio Expert	Digital	50,076	11,210,406.00
Q4	Audio Expert	Digital	53,275	11,190,923.00
Q1	TV City	Digital	41,307	10,128,967.00
Q4	eMart	Analog	39,515	9,383,389.00
Q3	eMart	Analog	36,306	8,308,647.00
Q2	TV City	Digital	29,627	6,732,303.00
Q2	AV VideoTown	Digital	27,377	5,928,507.00
Q4	Audio Expert	Analog	25,897	5,916,936.00

5. Click *Q2* for Audio Expert to check the monthly breakdown.

In the monthly report, both stores recorded their highest sales in June (06). Filter out the other stores and focus on Audio Expert in June.

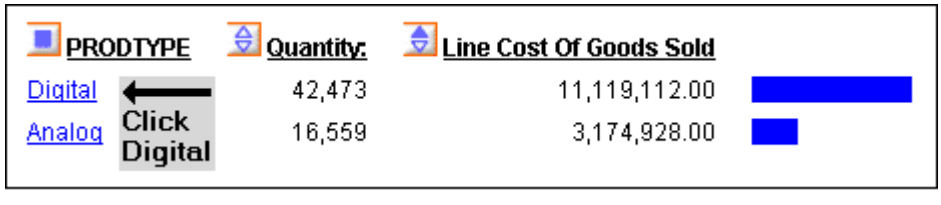
6. Click *Audio Expert*, as shown in the following image.



MONTH	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
06	Audio Expert	Digital	42,473	11,119,112.00
06	eMart	Digital	45,895	10,518,058.00
05	Audio Expert	Digital	36,505	8,930,974.00
04	Audio Expert	Digital	32,443	8,014,164.00
04	eMart	Digital	35,336	7,797,162.00
05	eMart	Digital	33,871	6,656,292.00
04	eMart	Analog	27,584	6,061,370.00
05	eMart	Analog	24,253	5,728,792.00
04	Audio Expert	Analog	24,312	5,087,601.00
06	eMart	Analog	22,900	4,999,241.00
05	Audio Expert	Analog	17,073	3,606,229.00
06	Audio Expert	Analog	16,559	3,174,928.00
05	TV City	Digital	10,296	2,745,088.00
06	AV VideoTown	Digital	11,466	2,507,452.00
06	TV City	Digital	9,848	1,997,234.00
04	TV City	Digital	9,483	1,989,981.00
05	AV VideoTown	Digital	7,336	1,728,971.00
04	AV VideoTown	Digital	8,575	1,692,084.00

You now see information for digital and analog sales at Audio Expert. Since the significant sales for Audio Expert are in the digital area, let us see which digital products contributed to the June figures.

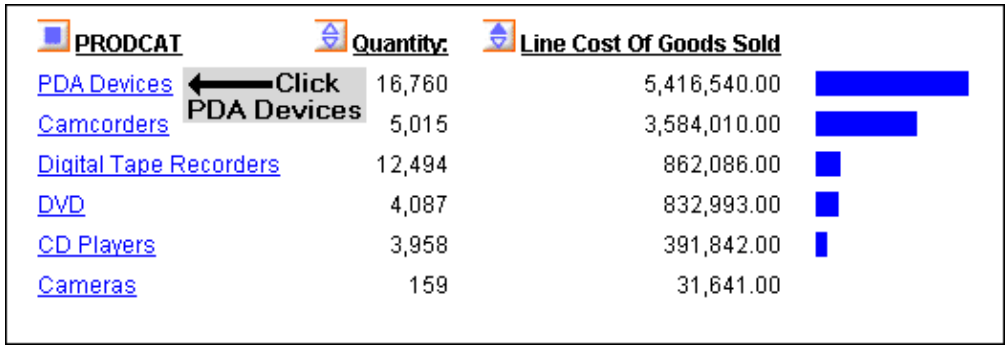
7. Click *Digital*, as shown in the following image.



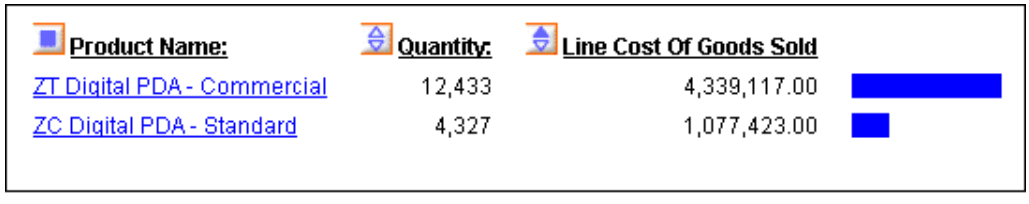
PRODTYPE	Quantity:	Line Cost Of Goods Sold
Digital	42,473	11,119,112.00
Analog	16,559	3,174,928.00

The breakdown shows clearly that PDAs drove Audio Expert digital sales.

8. Click *PDA Devices* to see the details, as shown in the following image.

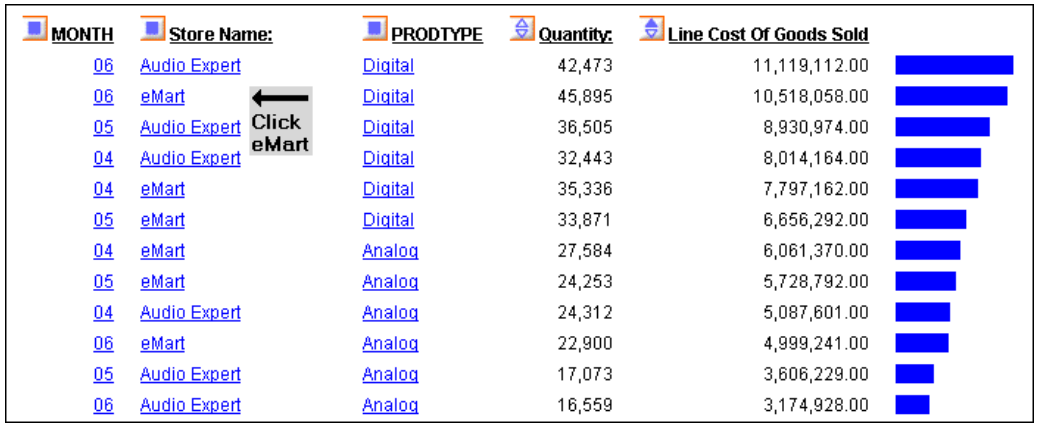


As shown in the following image, *ZT Digital PDA - Commercial* was by far the top seller.



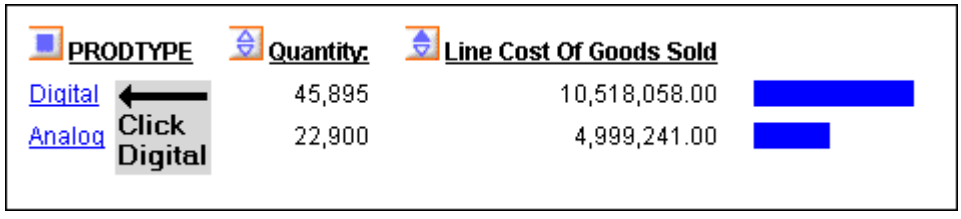
Let us now see what drove digital sales at eMart, the second highest producer.

9. Click the *Back* arrow, in the browser, until you return to the following window. This time, click *eMart*, as shown in the following image.


MONTH
Store Name:
PRODTYPE
Quantity:
Line Cost Of Goods Sold
Click eMart
06 Audio Expert Digital 42,473 11,119,112.00
06 eMart Digital 45,895 10,518,058.00
05 Audio Expert Digital 36,505 8,930,974.00
04 Audio Expert Digital 32,443 8,014,164.00
04 eMart Digital 35,336 7,797,162.00
05 eMart Digital 33,871 6,656,292.00
04 eMart Analog 27,584 6,061,370.00
05 eMart Analog 24,253 5,728,792.00
04 Audio Expert Analog 24,312 5,087,601.00
06 eMart Analog 22,900 4,999,241.00
05 Audio Expert Analog 17,073 3,606,229.00
06 Audio Expert Analog 16,559 3,174,928.00

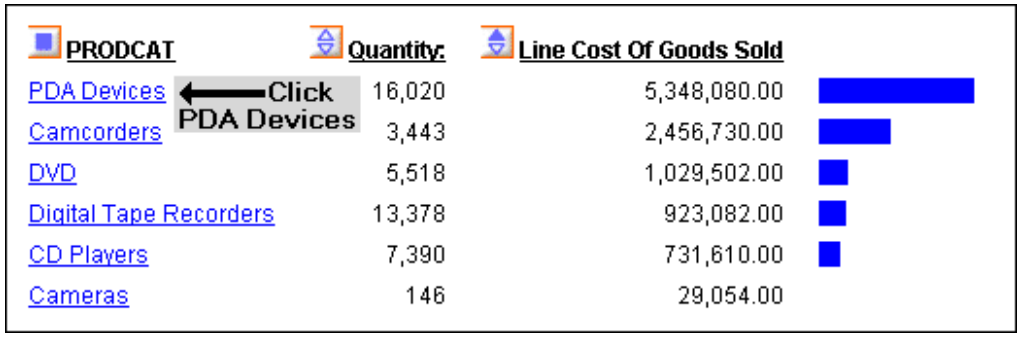
Once again, the digital category leads sales.

10. Click *Digital*, as shown in the following image.

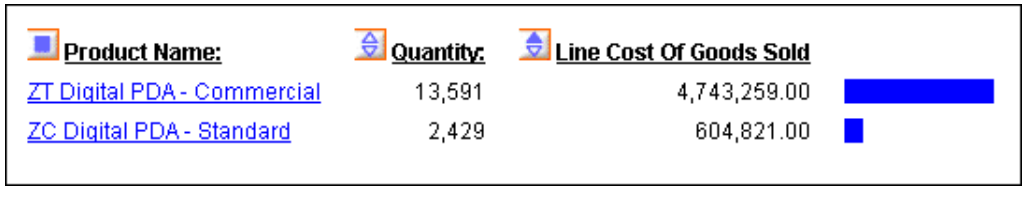


PDA is the strong seller here too.

11. Click *PDA Devices*, as shown in the following image, to examine the models that comprise these sales.



The report shows sales figures for the two digital models, as shown in the following image.

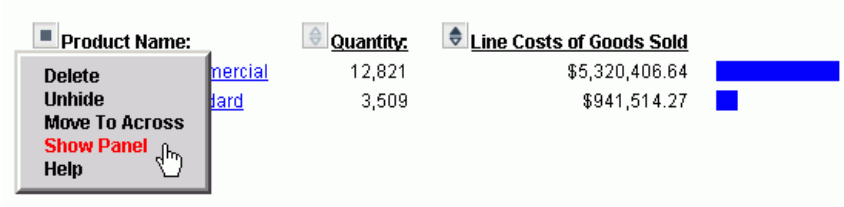


ZT Digital PDA - Commercial far outsells *ZC Digital PDA -Standard*.

This information from the two top selling stores suggests that Century Corporation should evaluate and adjust available parts inventories for each model and consider shifting production schedules of plants to produce more Commercial units.

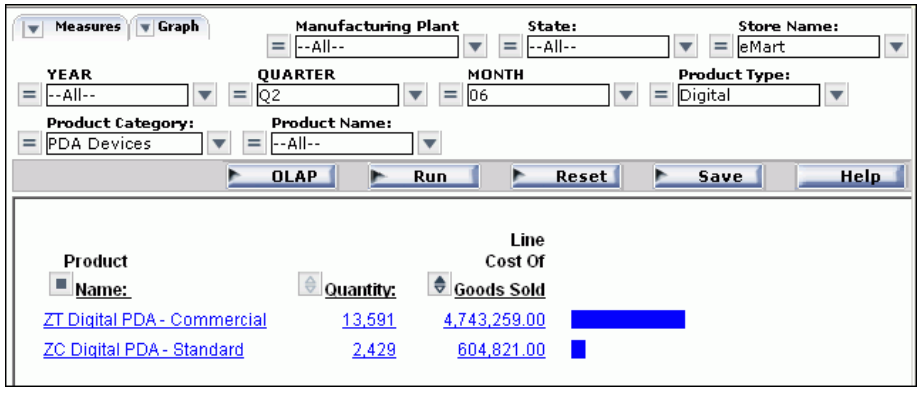
You have done all of your data manipulation from the report. But, because of the options you selected when OLAP-enabling this report, it is easy to expose the OLAP Selections pane where you can review the selections that are currently in effect, and make additional selections if you like. For details on OLAP set-up options, see *OLAP-Enabling a Report* on page 121.

12. To expose the OLAP Selections pane, right-click *Product Name* and select *Show Panel* from the menu, as shown in the following image.



Note: The options available may vary, depending on your OLAP format settings. For more information, see *Setting OLAP Reporting Options* on page 122.

The selection panel appears above the report, as shown in the following image.



Notice that STORENAME is eMart, PRODTYPE is Digital, and PRODCAT is PDA Devices.

OLAP Reporting Requirements

In this section:

OLAP-Enabling Data

OLAP-Enabling a Report

OLAP Terminology

OLAP reporting requires some preparation both of the data to be reported against and of the report itself. In many instances, this preparation is entirely transparent, having been done before a user encounters an OLAP report. However, for developers who are charged with OLAP-enabling data and reports and for users who wish, and are authorized, to OLAP enable their personal reports, the following summary will be useful.

OLAP-Enabling Data

Behind the scenes of any WebFOCUS OLAP report is a hierarchical data structure. For example, a typical hierarchy of sales regions might contain a GEOGRAPHY category including the fields (in descending order) Region, State, and City. Region, the highest level in this hierarchy, would contain a list of all available regions within GEOGRAPHY. State, the second highest level in the hierarchy, would contain a list of all available states within those regions, and others.

In WebFOCUS, the hierarchical structure is generally built into the Master File for a data source, where it becomes active for any report that uses that data source. Developers or administrators who are responsible for describing data in a Master File can use WebFOCUS language. The keyword WITHIN defines the elements in each dimension in the hierarchy.

In addition, those working in Developer Studio have access to a variety of graphical tools that make it easy to drag and drop fields into position to form a hierarchy. The hierarchy may be global to all procedures or local to one procedure. To define a:

- Global hierarchy in a Master File for use with multiple procedures, use the Dimension Builder.
- Local hierarchy as a component of a particular procedure, use the Dimension tool. The hierarchy you define with this tool does not affect the source Master File.

For details about these related tools, see the *Describing Data With Graphical Tools* manual.

OLAP-Enabling a Report

Reference:

Setting OLAP Reporting Options

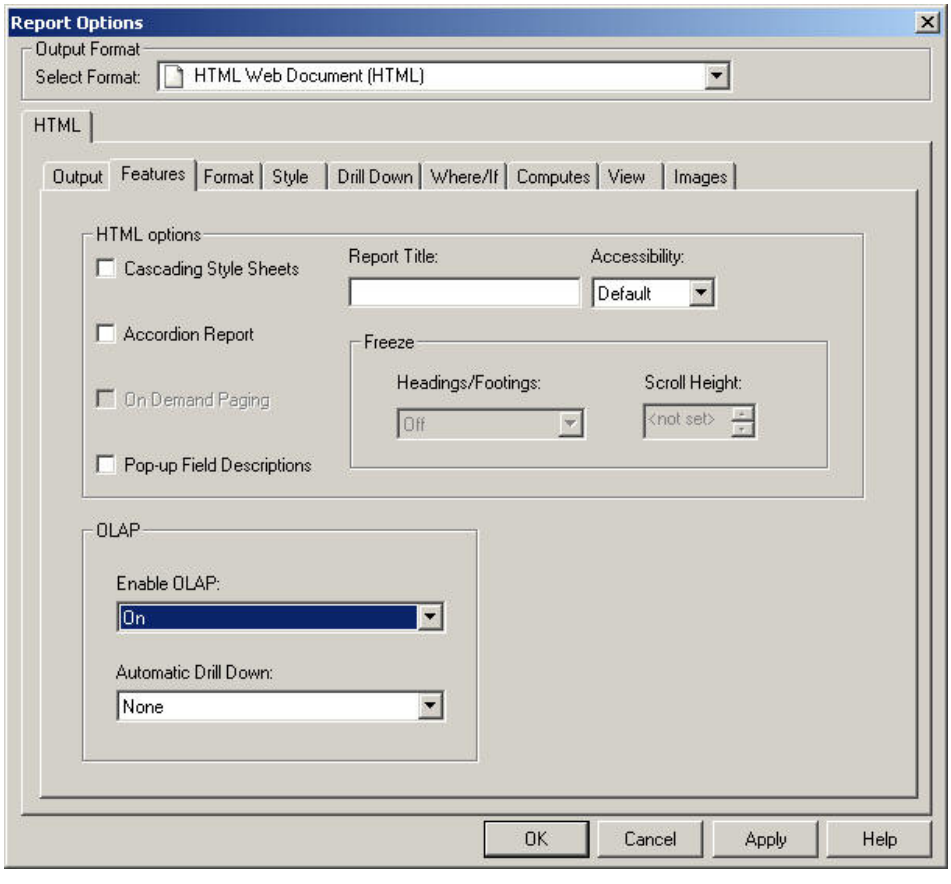
In addition to using OLAP-enabled data, a report must be enabled to support OLAP analysis. OLAP-enabling a report consists of specifying how a user will interact with and drill down on OLAP data.

The primary interactions occur in the report itself. In addition, you can choose to expose two supplementary tools, the OLAP Selections pane and the Control Panel.

Reference: Setting OLAP Reporting Options

Developer Studio

In Developer Studio, OLAP options are available on the Options Features tab in Report Painter. The relevant options (*Enable OLAP* and *Automatic Drill Down*) are located in the OLAP section of the tab, as shown in the following image.



Tip: In the Report Painter, you can also make OLAP selections from the *OLAP* option on the Report menu. For more information about using Report Painter, see the *Creating Reports With Report Painter* manual.

OLAP Interface Options

The *Enable OLAP* options in Developer Studio control how users can interact with an OLAP report and access OLAP tools.

For Standard Reports delivered to Managed Reporting users, these decisions are made by Managed Reporting content developers. However, users who are creating their own reports can OLAP enable them and control the OLAP interfaces and following drill-down options.

- **Disabled.** OLAP options are disabled and not shown in the OLAP report.
- **Off.** Turns off the OLAP Control Panel and the OLAP Selections pane, but allows OLAP functionality from the report itself. You can access options on right-click menus, drag and drop columns within the report, and use up and down arrows to sort columns from high to low or low to high.
- **On.** Provides access to the OLAP Selections pane from a square button to the left of the column titles. You can open the Control Panel by clicking the OLAP button in the OLAP report.
- **Top Panel.** Opens the OLAP Selections pane above the report. The Measures, Graph, and Dimension controls, as well as the band containing the OLAP, Run, and Reset buttons appear above the report output. You can open the Control Panel by clicking the OLAP button on the Selection pane.
- **Bottom Panel.** Opens the OLAP Selections pane below the report. The Measures, Graph, and Dimension controls, as well as the band containing the OLAP, Run, and Reset buttons appear below the report output. You can open the Control Panel by clicking the OLAP button on the Selection pane.
- **Hidden Panel.** Opens the OLAP report with the OLAP Selections pane hidden. You can perform a variety of analytic tasks from the report itself. Selection Criteria is shown next to the OLAP button.
- **Show Tabbed.** For OLAP reports that have multiple dimensions, this option groups the dimension elements under a tab labeled with the dimension name.

Drill Down options

These options enable you to sort instantly from high to low or low to high for selected report columns:

- **None.** Disables automatic drill downs.
- **Dimensions.** Enables automatic drill downs on dimensions in both reports and graphs.
- **Dimensions and Measures.** Enables automatic drill downs on dimensions in both reports and graphs and, also, on measures in reports.

Note: Explicit drill downs in a StyleSheet (if they exist) take precedence over OLAP-enabled hyperlinks. If you click a hyperlink associated with an explicit drill down, the behavior will be defined by the StyleSheet rather than by the AutoDrill On or All settings.

OLAP Terminology

The following table describes OLAP terms that may be useful as you work in the WebFOCUS OLAP tools. Some of these terms are directly reflected in the interfaces of the OLAP Selections pane and the OLAP Control Panel. Others provide useful background information.

The first column of the following table provides the term and the second column provides the definition.

Term	Definition
Dimension	Group or list of related elements, usually structured in a hierarchy. For example, a Location dimension could include the elements Country, Region, State, and City arranged in a hierarchy where Country is the top level and City is the base level. Dimensional data usually describes the measured item.
Hierarchy	Logical parent-child structure of elements within a dimension.
Measure	Type of item that specifies the quantity of another element with which it is associated. A measure typically defines how much or how many. For example, Units, Revenue, and Gross Margin are measures in the Account dimension and specify how many units were sold, how much revenue was generated, and at what profit margin, respectively.
Pivot	Manipulating (or rotating) the view of a report by moving a field (or a group of fields) from a column to a row, or row to column.

Characteristics of an OLAP Report

An OLAP-enabled report has a number of features that distinguish it from other WebFOCUS reports.

A basic OLAP report is shown in the following image.

QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	Analog	18,449	3,969,296.00
		Digital	22,206	5,109,400.00
	Audio Expert	Analog	78,449	16,467,146.00
		Digital	105,983	25,092,678.00
	City Video	Analog	6,287	1,315,015.00
		Digital	7,196	1,607,513.00
	Consumer Merchandise	Analog	6,980	1,542,036.00
		Digital	14,957	3,251,090.00
	TV City	Analog	19,077	3,772,119.00
		Digital	41,307	10,128,967.00
	Web Sales	Analog	545	124,366.00
		Digital	829	190,201.00
	eMart	Analog	97,128	21,152,262.00
		Digital	108,221	24,990,368.00
Q2	AV VideoTown	Analog	11,781	2,663,655.00
		Digital	27,377	5,928,507.00
	Audio Expert	Analog	57,944	11,868,758.00

Every OLAP user can take advantage of the analytic features that are built into the OLAP report:

- **Hyperlinks.** The values in an OLAP report are usually hyperlinks from which you can drill down to related information.

  Depending on your OLAP settings, the hyperlinks may be active for both the dimension fields (by which the report is sorted) and the measures fields (which display quantitative data), or only for the dimension fields. For related information, see *OLAP-Enabling a Report* on page 121.

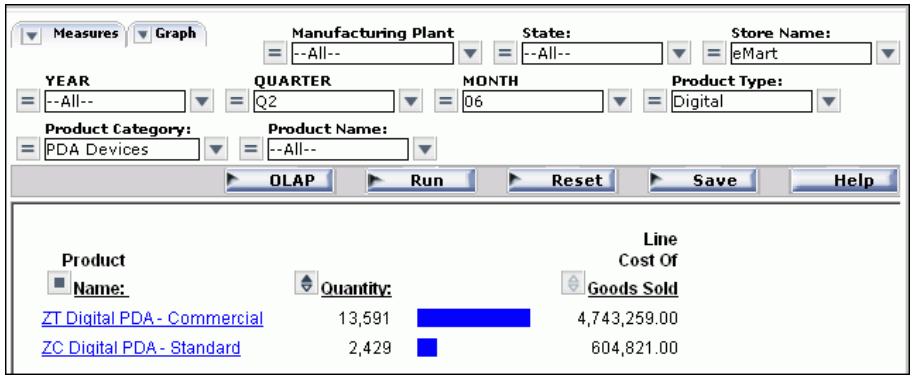
- **Context menus.** You can right-click any column title to access a menu of options that facilitate analysis. The options vary slightly to suit the tasks associated with dimensions and measures.

- **Sorting diamonds** **.** The measures (fields that make up the body of the report) have blue diamonds adjacent to them. You can click either the top or bottom of the diamond to instantly sort data from high to low or low to high.

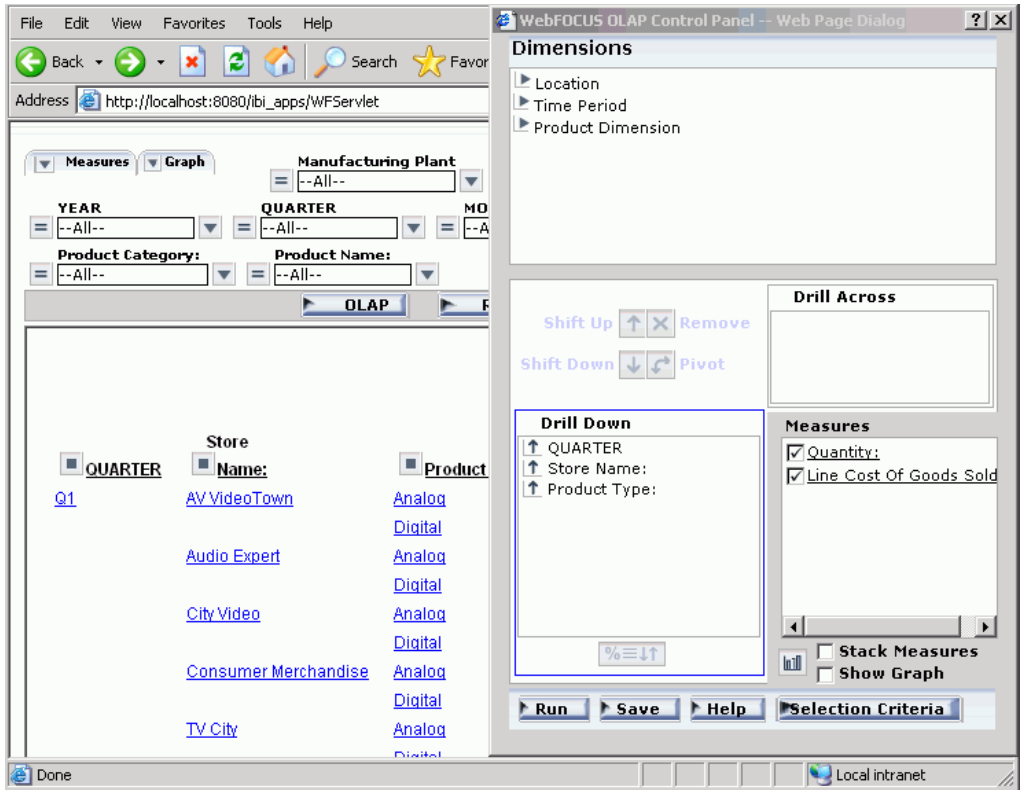
- **Drag and drop capabilities for dimensions and measures.**
  - You can drag and drop sort fields to shift sorting from vertical (By) to horizontal (Across) or vertical to horizontal.
  - You can change the order in which sorting occurs by dragging sort fields from inner to outer positions or outer to inner positions.
  - You can drag measures from one position to another to affect the order in which data appears.

Beyond the features in the report itself, your OLAP options depend on the interface and drill-down settings that are in effect for a particular report. Those choices determine whether you have access to the following tools:

- **Selections Pane.** When this tool is available, a pane may appear above or below your report, as shown in the following image. For details, see *Selections Pane* on page 128.



- **OLAP Control Panel.** When this tool is available, the square icons adjacent to the sort fields (By or Across) in the report become active. You can click a square or the *OLAP* button to open the Control Panel, as shown in the following image. For details, see *OLAP Control Panel* on page 130.



Three Ways of Working With OLAP Data

In this section:

The Report

Selections Pane

OLAP Control Panel

There are three ways to work with OLAP data: from the report itself, from the Selections pane, and from the Control Panel. This documentation is organized to help you understand what you can do from each location and which method is most suitable and efficient for your particular OLAP settings.

The Report

You can perform a wide range of basic analytic functions from the report itself. Changes you make in the report are implemented instantly. Every OLAP user can perform these tasks:

- Sort the data in measures in either ascending (lowest value to highest) or descending order (highest value to lowest).
- Drill down on measures, dimensions, or both (depending on the settings described in *Setting OLAP Reporting Options* on page 122).
- Hide fields in the current report.
- View hidden fields in the dimensions hierarchy and add them to the report.
- Change a vertical (By) sort field to a horizontal (Across) sort field and vice versa.
- Delete sort fields.
- Add a column of small bar graphs that help you visualize trends in numeric data (measures).
- Display a graphical representation of your data in a frame above the tabular report.

For an illustration of report-powered OLAP analysis, see *We Do It Every Day: Typical Web Query* on page 112.

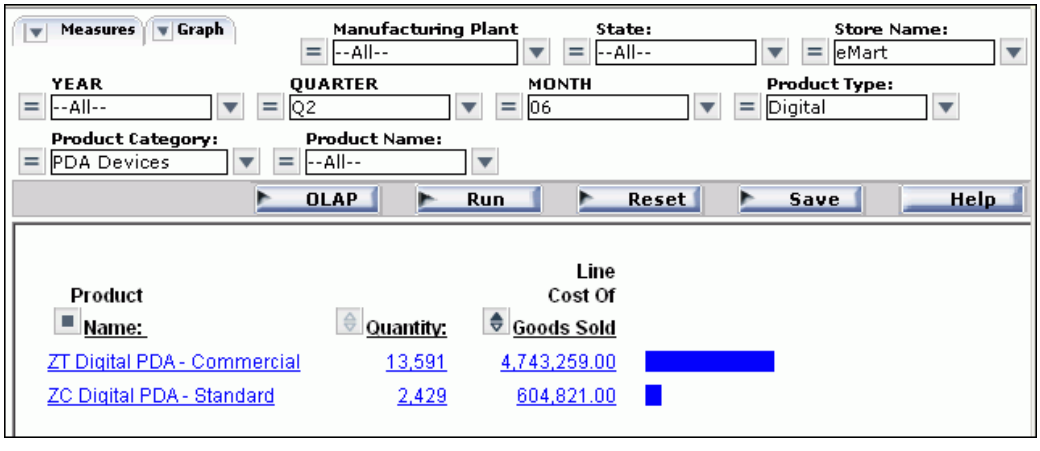
Selections Pane

When the OLAP Selections pane is turned on, you can quickly limit the data in the report by selecting specific values for the dimensions in the hierarchy. A drop-down list is available for each dimension. You can multi-select values from one or more dimension lists to refine your report output.

If you wish to add a dimension element to the report you can drag it from the Selections pane into the report frame. (The cursor changes to a plus sign (+) to indicate an acceptable location.)

Each dimension has a relational operator button located to its left. This button toggles through a selection of basic numeric operators that enable you to quickly define your selection criteria. The operators are: Equal to, Not equal to, Less than or equal to, Less than but not equal to, Greater than or equal to, and Greater than but not equal to. For details, see *Selection Criteria Relational Operators* on page 176.

The following image shows the Equal to operator as the selection for each dimension in the Selection Pane.



The name of the dimension field appears as defined in the Master File, even if an alternate column title has been specified.

In addition, you can customize the display of the measures in your report from the Selections pane. You can click either the Measures or the Graphs arrow in the upper-left corner of the pane to list the measures.

- From the Measures arrow, you can display or hide the selected measure(s) or request a column of simple bar graphs to reveal trends.
- From the Graphs arrow, you can choose the measure(s) you wish to graph and specify one of seven basic graph types: vertical and horizontal bar, line, area, and pie charts.

Note that the Selections pane is resizable. The controls for dimensions, measures, and graphs float as you resize the report window, so that they continue to be visible in the frame.

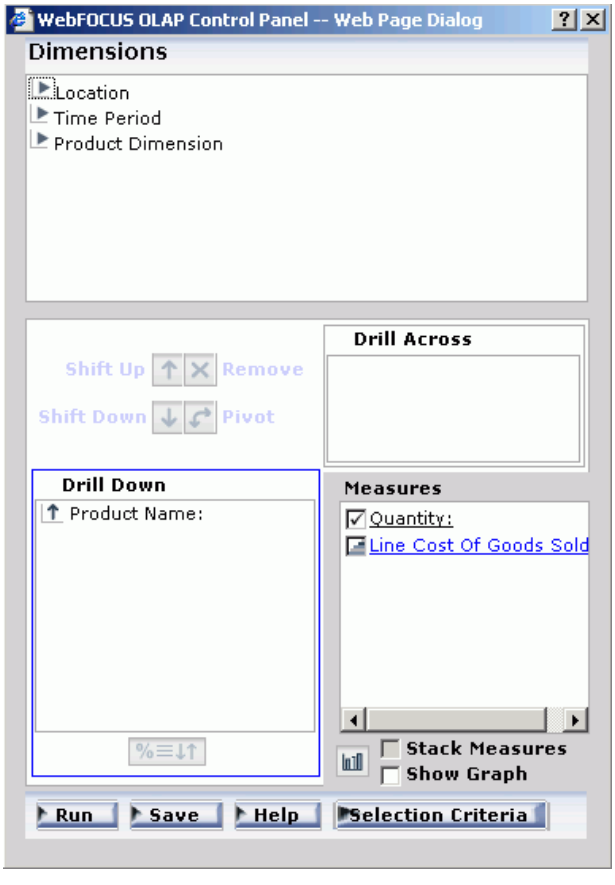
Five buttons appear below the Selections pane: OLAP, Run, Reset, Save, and Help.

- **OLAP** opens the OLAP Control Panel (OCP).
- **Run** executes the report with the current set of selections.

- **Reset** resets all the controls in the report to their previous state (that is, before the current set of selections was made and after the last execution of the report).
- **Save** opens a list of options from which you can save or view the document.
- **Help** opens up the WebFOCUS online help.

OLAP Control Panel

From the Control Panel you can perform every analytic function available to a WebFOCUS OLAP user, as shown in the following image.



The main window of the Control Panel contains the following components:

- **Dimensions pane** reflects the hierarchical structure of the data source being used by the current report. For example, the Location dimension contains the Region, State, and City fields. The Region is made up of several States, and each State contains several Cities. You click the arrow to the left of a dimension name to view the elements that comprise it. (The fields shown here are also listed in the Selections pane.)
- **Drill Down and Drill Across panes** list the fields being used to sort the report. You can 'pivot' a Drill Down field to a Drill Across field or a Drill Down Across field to a Drill down field, and shift their positions in the report. (You can also accomplish these tasks by dragging fields within the report.)
- **Measures Properties pane** contains the body of your report (usually numeric fields). You can change the display mode of a measure by clicking the check pane next to the measure; the options are display, hide, and show a column of associated bar graphs. (This is equivalent to the options available from the Measures control in the Selections pane.)

Although the most frequently used functions are available directly from an OLAP report and/or from the Selections pane, several can only be performed from the Control Panel.

Unique Control Panel operations include:

- Sorting options for dimensions: from highest to lowest or lowest to highest (A>Z or Z>A), restricting sort field values to a specified number of either highest or lowest values, and assigning a rank number to each row in the report. For details, see *Sorting Data* on page 143.
- Options for grouping numeric data by tile (for example, percentile, decile, or quartile). For details, see *Grouping Numeric Data Into Tiles* on page 168.
- Defining selection criteria based on omitted or existing characters, dates, and range specifications. For details, see *Limiting Data* on page 176.
- Saving OLAP output in PDF and Excel formats. In Managed Reporting, users can also save OLAP output in the My Reports folder. For details, see *Saving and Displaying OLAP Reports and Graphs in Other Formats* on page 230.
- Stacking multiple measures to limit the width of the report. For details, see *Stacking Measures* on page 211.

Drilling Down On Dimensions and Measures

You can drill down on dimensions in OLAP reports and graphs and, also, on measures in reports. The settings activate the required hyperlinks:

- **Dimensions** enables automatic drill downs on dimensions in reports and graphs.

- **Dimensions and Measures** enables automatic drill downs on dimensions in both reports and graphs and on measures in reports.
- **None** disables automatic drill downs. This is the default.

In Developer Studio, you can set drill-down options from the Report Options Features tab. For details about this setting, see *Setting OLAP Reporting Options* on page 122.

Example: Drilling Down on Dimensions in a Report

This report you are about to run uses data from a hierarchy that contains three dimensions, each of which has three elements. The report is sorted by the specified field from each dimension. The following table outlines three dimensions, Time Period, Location, and Product Dimension to which each contains three elements.

Time Period	Location	Product Dimension
Year	Manufacturing Plant	**PRODTYPE**
Quarter	State	PRODCAT
Month	**Store Name**	PRODNAME

The report will show data at different levels in each dimension: Quarter is down one level in its dimension, Store Name is at the lowest level in its dimension, PRODTYPE is the top level in its dimension. This determines how much farther you can drill down within each dimension. If you drill down on a value of Quarter, the report shows information broken down by Month within that Quarter. The Quarter column itself will no longer appear.

1. Run the Standard Report *OLAPREP2*.

   In this quarterly report, drill-down hyperlinks are active for both dimensions and measures.

2. Click *Q1* in the quarterly report, shown in the following image, to see a monthly report.

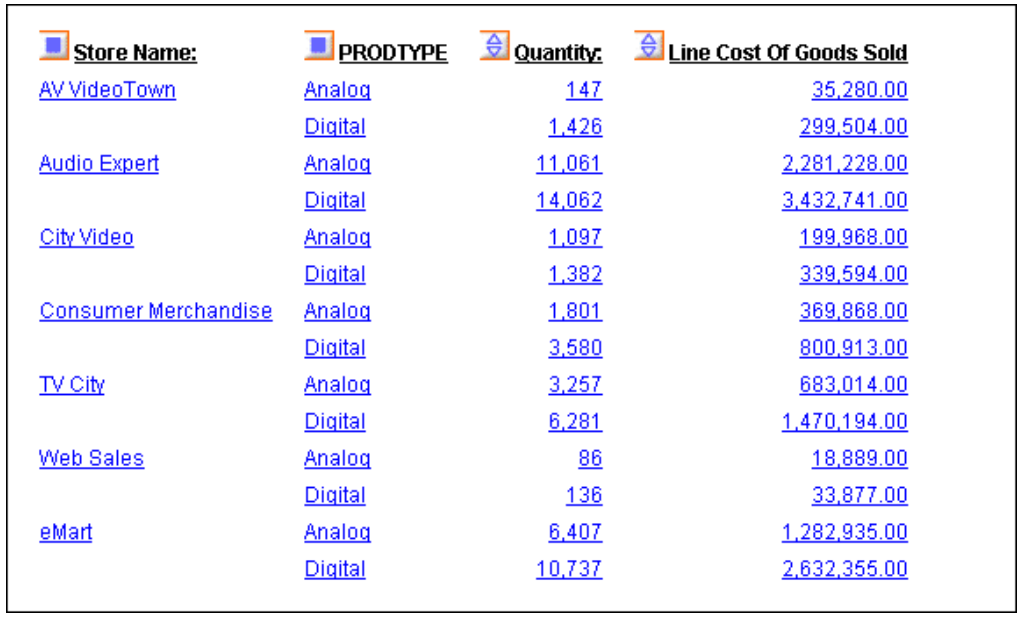
QUARTER	Store Name:	Product Type:	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	Analog	18,449	3,969,296.00
		Digital	22,206	5,109,400.00
	Audio Expert	Analog	78,449	16,467,146.00
		Digital	105,983	25,092,678.00
	City Video	Analog	6,287	1,315,015.00
		Digital	7,196	1,607,513.00
	Consumer Merchandise	Analog	6,980	1,542,036.00
		Digital	14,957	3,251,090.00
	TV City	Analog	19,077	3,772,119.00
		Digital	41,307	10,128,967.00
	Web Sales	Analog	545	124,366.00
		Digital	829	190,201.00
	eMart	Analog	97,128	21,152,262.00
		Digital	108,221	24,990,368.00
Q2	AV VideoTown	Analog	11,781	2,663,655.00
		Digital	27,377	5,928,507.00
	Audio Expert	Analog	57,944	11,868,758.00
		Digital	111,421	28,064,250.00
	City Video	Analog	1,405	285,323.00

The monthly report looks like this. Since Month is the bottom level in its dimension, if you drill down on a month value, you will no longer see the month column. However, you will see the data that relates to the selected month in subsequent columns.

3. Click the *01* in the monthly report, shown in the following image, to see details for January.

MONTH	Store Name:	Product Type:	Quantity:	Line Cost Of Goods Sold
01	AV VideoTown	Analog	147	35,280.00
		Digital	1,426	299,504.00
	Audio Expert	Analog	11,061	2,281,228.00
		Digital	14,062	3,432,741.00
	City Video	Analog	1,097	199,968.00
		Digital	1,382	339,594.00
	Consumer Merchandise	Analog	1,801	369,868.00
		Digital	3,580	800,913.00
	TV City	Analog	3,257	683,014.00
		Digital	6,281	1,470,194.00
	Web Sales	Analog	86	18,889.00
		Digital	136	33,877.00
	eMart	Analog	6,407	1,282,935.00
		Digital	10,737	2,632,355.00
02	AV VideoTown	Analog	9,124	1,982,103.00
		Digital	10,823	2,331,172.00
	Audio Expert	Analog	34,413	7,254,037.00

As shown in the following image, the January report shows product type, quantity, and line cost of good sold for each store.

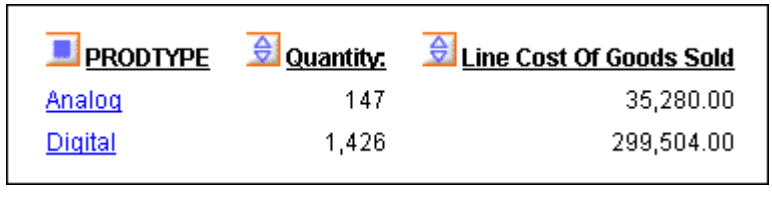


Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
AV VideoTown	Analog	147	35,280.00
	Digital	1,426	299,504.00
Audio Expert	Analog	11,061	2,281,228.00
	Digital	14,062	3,432,741.00
City Video	Analog	1,097	199,968.00
	Digital	1,382	339,594.00
Consumer Merchandise	Analog	1,801	369,868.00
	Digital	3,580	800,913.00
TV City	Analog	3,257	683,014.00
	Digital	6,281	1,470,194.00
Web Sales	Analog	86	18,889.00
	Digital	136	33,877.00
eMart	Analog	6,407	1,282,935.00
	Digital	10,737	2,632,355.00

Next, see what happens when you drill down in the Location dimension (in this case, on a value of Store Name in the second column of the report). When you drill down on a dimension column other than the first, output is affected to the right and left of that column.

4. Click the *Back* button, in the browser, to return to the monthly report, then click *AV VideoTown* in the second column.

   Since Store Name is the lowest level in its dimension, the Store Name column no longer appears, nor does the Time Period column to its left. Nevertheless, both the store name (AV VideoTown) and the current time period (January) set the context for the information you see, which now consists of types of products sold, quantity sold, and line cost of sold goods for AV VideoTown in January, as shown in the following image.



PRODTYPE	Quantity:	Line Cost Of Goods Sold
Analog	147	35,280.00
Digital	1,426	299,504.00

Example: Drill Down on Measures in Reports

By drilling down on a measure, you expose the next level of detailed information associated with that measure for each displayed dimension in the hierarchy. In other words, when you drill down on a measure, the current dimension is used as a limiting criterion. The rest of the hierarchy is then expanded based on that limitation.

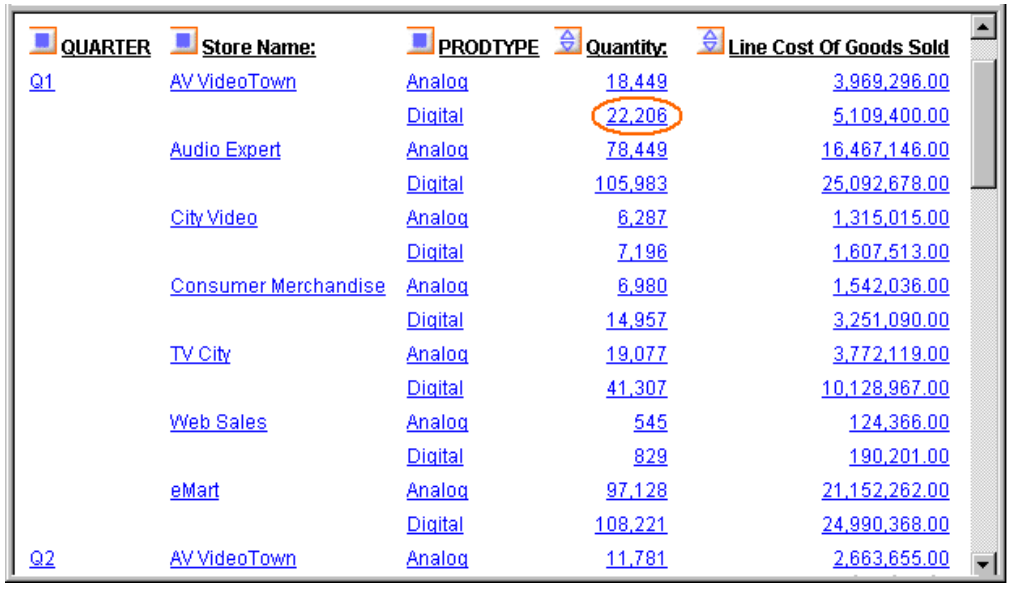
Remember that a measure contains quantitative information about fields in each dimension.

In this example, Quantity and Line of Sold Goods provide data about products at particular stores during particular time periods.

1. Run the Standard Report *OLAPREP2*.

Notice that quantity of sales for all digital products at AV VideoTown in the first quarter of the year is 22,206. You want to find out how much each digital product contributed to the total quantity.

2. Click *22,206* under Quantity, as shown in the following image.



QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	Analog	18,449	3,969,296.00
		Digital	22,206	5,109,400.00
	Audio Expert	Analog	78,449	16,467,146.00
		Digital	105,983	25,092,678.00
	City Video	Analog	6,287	1,315,015.00
		Digital	7,196	1,607,513.00
	Consumer Merchandise	Analog	6,980	1,542,036.00
		Digital	14,957	3,251,090.00
	TV City	Analog	19,077	3,772,119.00
		Digital	41,307	10,128,967.00
	Web Sales	Analog	545	124,366.00
		Digital	829	190,201.00
	eMart	Analog	97,128	21,152,262.00
		Digital	108,221	24,990,368.00
Q2	AV VideoTown	Analog	11,781	2,663,655.00

As shown in the following image, the report now shows total quantity for digital products sold at AV VideoTown broken out by month, product category, and product name. Notice that Store Name no longer appears. Since it is the lowest level of the Location dimension, there is no lower level of detail.

MONTH	PRODCAT	Product Name:	Quantity:	Line Cost Of Goods Sold
01	DVD	Combo Player - 4 Hd VCR + DVD	147	42,483.00
		DVD Upgrade Unit for Cent. VCR	147	20,433.00
	Digital Tape Recorders	R5 Micro Digital Tape Recorder	566	39,054.00
	PDA Devices	ZT Digital PDA - Commercial	566	197,534.00
02	CD Players	QX Portable CD Player	2,161	213,939.00
	Camcorders	650DL Digital Camcorder 150 X	545	386,950.00
	DVD	Combo Player - 4 Hd VCR + DVD	624	180,336.00
		DVD Upgrade Unit for Cent. VCR	621	86,319.00
	Digital Tape Recorders	R5 Micro Digital Tape Recorder	2,815	194,235.00
	PDA Devices	ZC Digital PDA - Standard	1,465	364,785.00
		ZT Digital PDA - Commercial	2,592	904,608.00
03	CD Players	QX Portable CD Player	538	53,262.00
	Camcorders	650DL Digital Camcorder 150 X	1,101	781,710.00
	DVD	Combo Player - 4 Hd VCR + DVD	1,063	307,207.00
		DVD Upgrade Unit for Cent. VCR	589	81,871.00

Since all relevant information is now visible, no further drill downs are possible and the measure is no longer represented as a hyperlink.

Next, verify this behavior at another level in the hierarchy.

3. Click the *Back* button in your browser to return to the original report.
4. Click *Q1* to see the monthly breakdown for that quarter.
5. Click *AV VideoTown*. You are now looking at types of products sold, quantity sold, and line cost of goods sold at AV VideoTown.
6. Drill down on *1,426* under Quantity, as shown in the following image.

Product Type:	Quantity:	Line Cost Of Goods Sold
Analog	147	35,280.00
Digital	1,426	299,504.00

PRODTYPE *Digital* serves as the limiting criterion. Therefore, the expanded hierarchy shows the next level of detail for each digital product. This level is comprised of digital product categories (PRODCAT) and the names of the products in each category (Product Names).

The report displays, as shown in the following image, the detailed data for each element in the PRODTYPE dimension (in this case, the product categories and product names that comprise the quantity figure of 1,426). The total quantity and, correspondingly, the line cost of goods data, is now broken down by product.

PRODCAT	Product Name:	Quantity:	Line Cost Of Goods Sold
DVD	Combo Player - 4 Hd VCR + DVD	147	42,483.00
	DVD Upgrade Unit for Cent. VCR	147	20,433.00
Digital Tape Recorders	R5 Micro Digital Tape Recorder	566	39,054.00
PDA Devices	ZT Digital PDA - Commercial	566	197,534.00

Note that when you drill down on a measure value, results may differ depending on the combination of sort fields in the report. The examples that follow show several variations.

Example: Drilling Down on a Measure in a Report With ACROSS Fields

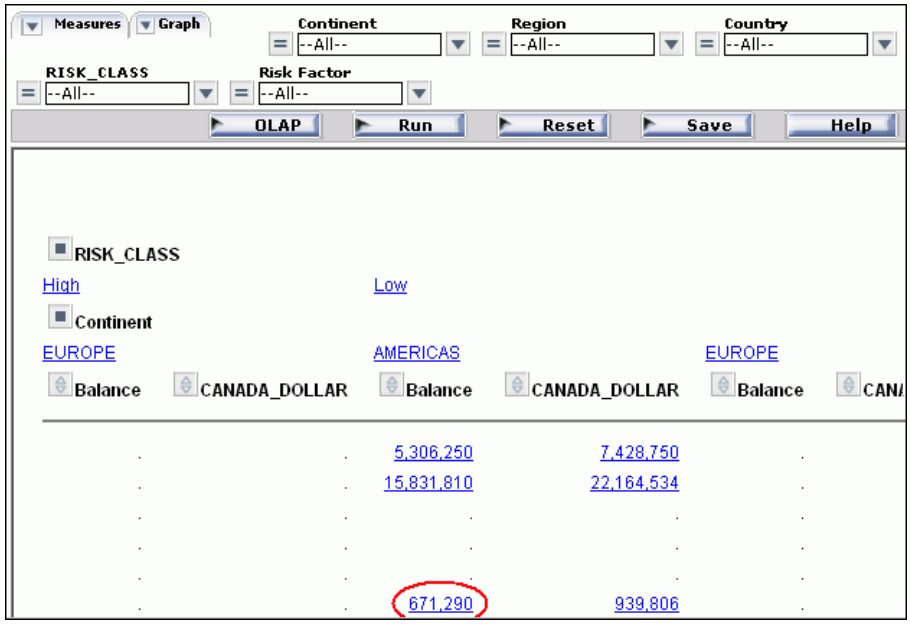
When you drill down on a measure in a report with at least one dimension Across field and no By fields, all Across fields are removed from the report and all of the dimension elements under the removed Across fields become By fields from left to right in the resulting report.(This convention ensures that the maximum number of Across values supported by WebFOCUS is not exceeded.)

The values that appear for the new By fields are controlled by internally generated selection criteria. The measure values in the resulting report depend on the values of the new By fields.

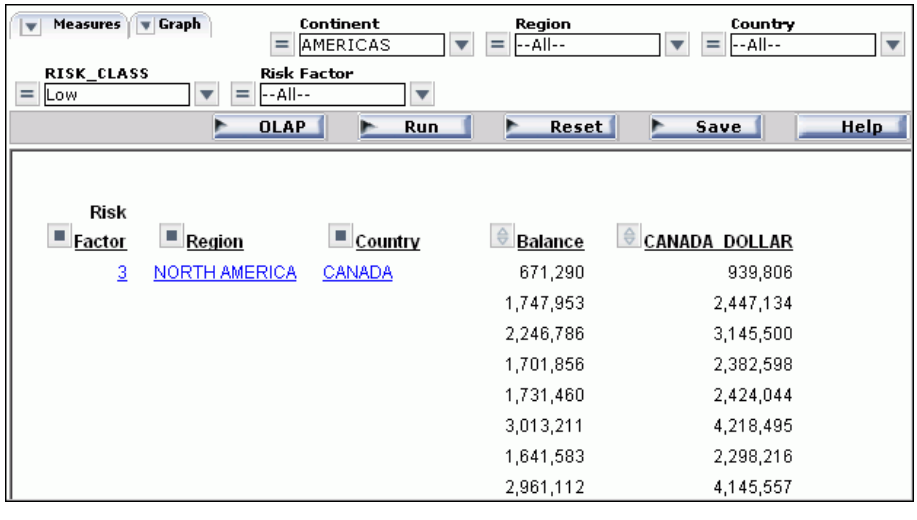
1. Run the Standard Report *OLAPREP3*.

In the report, RISK_CLASS and Continent are dimension Across fields on which you can drill down.

2. Click the Balance value *671,290* under RISK_CLASS Low and Continent AMERICAS, as shown in the following image.



The report now looks like the following image.



In the new report, the RISK_CLASS and Continent fields are removed based on two internally generated criteria: IF RISK_CLASS EQ 'Low' and IF Continent EQ 'AMERICAS'.

The only dimension element under RISK_CLASS is Risk_Factor. The dimension elements under Continent are Region and Country. These become By fields in the new report, from left to right. The data displayed for the measures in the resulting report are those that satisfy the values in the current By fields.

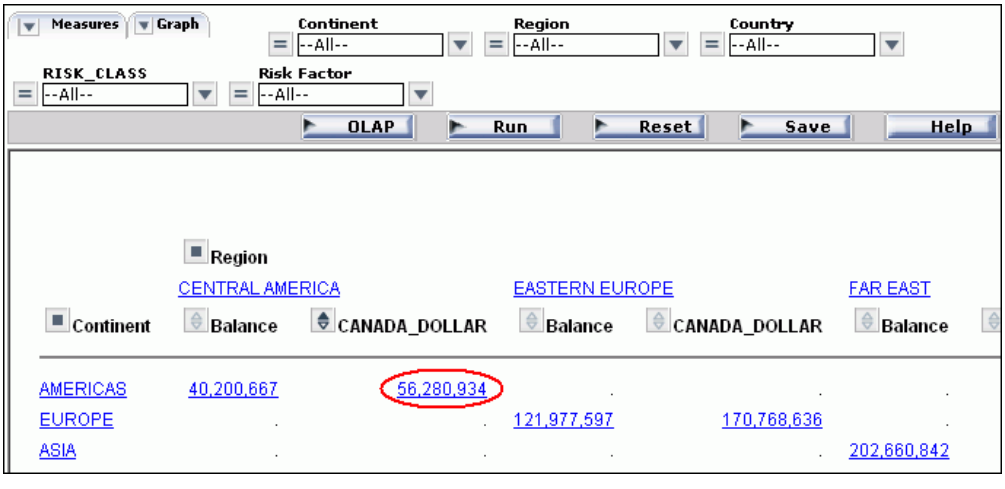
Example: Drill Down on a Measure When BY/ACROSS Fields Are Under the Same Dimension

When you drill down on a measure in a report with at least one By and one Across dimension field under the same root dimension, both the By and Across fields are hidden and the subordinate element(s) in the same dimension becomes By fields in the new report. In effect, the report is filtered based on the values of the dimensions. As a result, the sorting controlled by both hidden and visible dimensions remains in effect.

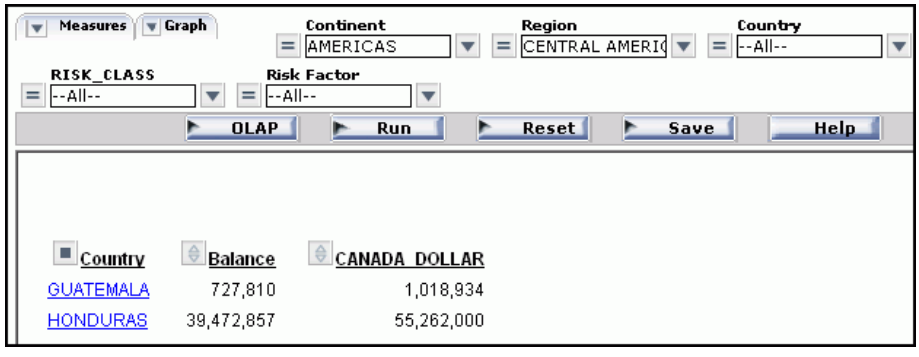
1. Run the Standard Report *OLAPREP4*.

   In the report, Continent is a By field and Region is an Across field. Both are in the Geographic Area dimension.

2. Click the CANADA_DOLLAR value of *56,280,934* in the Continent row for AMERICAS under the Region CENTRAL AMERICA, as shown in the following image.



The report now looks like the following image.



In the new report, data is filtered based on the internally generated criteria: IF Continent EQ 'AMERICAS' and IF REGION EQ 'CENTRAL AMERICA.' (Continent and Region are no longer visible.)

REGION is replaced by the last element in the Geographic Area dimension, Country, which becomes the controlling By field in the report. The data displayed for the measures are those that satisfy the values in the current By field.

Example: Drill Down on a Measure When BY/ACROSS Fields Are Under Different Root Dimensions

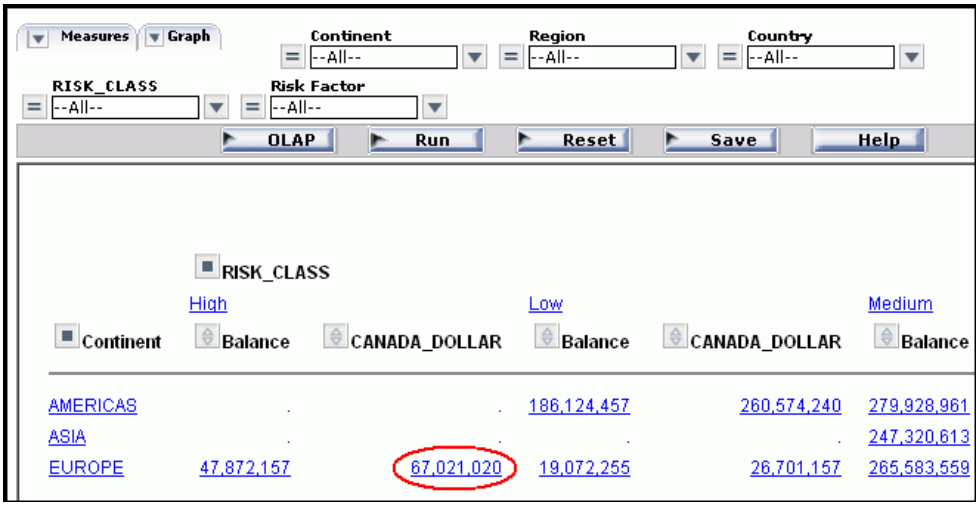
When you drill down on a measure in a report with at least one By and one Across dimension field from different root dimensions, the By fields are broken down to their last dimension level, then the Across fields are broken down.

The original By and Across fields are removed. The dimension elements under the removed By fields become the first set of By fields from left to right. The dimension elements under the removed Across fields follow the first set of By fields from left to right.

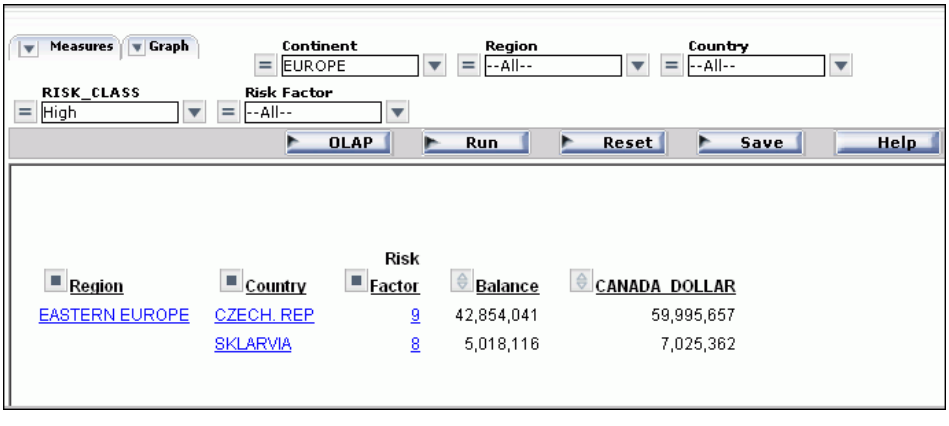
1. Run the Standard Report *OLAPREP5*.

In the report, Continent is a By field from the Geographic Area dimension and Risk Class is an Across field from the Risk dimension.

2. Click the CANADA_DOLLAR value of *67,021,020* in the Continent row for EUROPE under the RISK_CLASS High, as shown in the following image.



The report looks like the following image.



In the new report, the Continent and RISK_CLASS fields are removed based on the internally generated criteria: IF CONTINENT EQ 'EUROPE' and IF RISK_CLASS EQ 'High'.

The By field (Continent) is broken down to its last dimension element. Then, the Across field (RISK_CLASS) is broken down to its last dimension level. The resulting By fields in the report, from left to right, are Region, Country, and Risk Factor. The data displayed for the measures satisfy the values in the current By fields.

Sorting Data

In this section:

Sorting Measures

Sorting Dimensions

Grouping Numeric Data Into Tiles

You can sort the data in an OLAP report based on the values of dimensions in the hierarchy and/or the values of the quantitative measures that constitute the body of the report. Sorting options vary depending on the nature of the data being sorted. For details, see *Sorting Measures* on page 143 and *Sorting Dimensions* on page 150.

You can also group numeric data into any number of tiles (percentiles, quartiles, deciles, etc.). See *Grouping Numeric Data Into Tiles* on page 168.

Sorting Measures

How to:

Sort Measures High to Low/Low to High in an OLAP Report

Sort Measures High to Low/Low to High From the Control Panel

View a Subset of Data for Sorted Measures

Remove Sorting Criteria for a Measure

You can apply aggregation and sorting simultaneously to a numeric measure in an OLAP report, and sort the data from high to low (descending order) or from low to high (ascending order). All other columns are sorted correspondingly.

For the measure being sorted, you can restrict the report to a specified number of highest values (when sorting high to low) or lowest values (when sorting from low to high).

When you sort a measure, any subtotals, subheadings, or subfootings in the report are automatically suppressed since these elements relate to a specific sort field and are not meaningful when the report is resorted by the values in a measure column. For an illustration, see *Applying a Percent Calculation to a Measure* on page 173.

Note: Sorting by measures is not available in a report in which measures have been stacked. See *Hiding and Displaying Measures* on page 216.

Procedure: How to Sort Measures High to Low/Low to High in an OLAP Report

To sort the values of a measure from high to low:

- Click the top half of the diamond button.

  or

- Right-click the measure and select *Sort By Highest* from the menu.

The report runs automatically. The highest value is now first in the column. The top of the diamond button becomes solid blue to indicate the current sort direction.

To sort the values of a measure from low to high:

- Click the bottom half of the diamond button.

  or

- Right-click the measure and select *Sort By Lowest* from the menu.

The lowest value is first in the column. The bottom of the diamond button becomes solid blue.

Tip: After a measure has been sorted, clicking the upper or lower half of the diamond button inverts the sort order of that measure. Place your mouse over either half of the diamond to see a message that indicates the next sort order that will occur if you click that half of the diamond.

Example: Sorting a Measure From High to Low in the Report

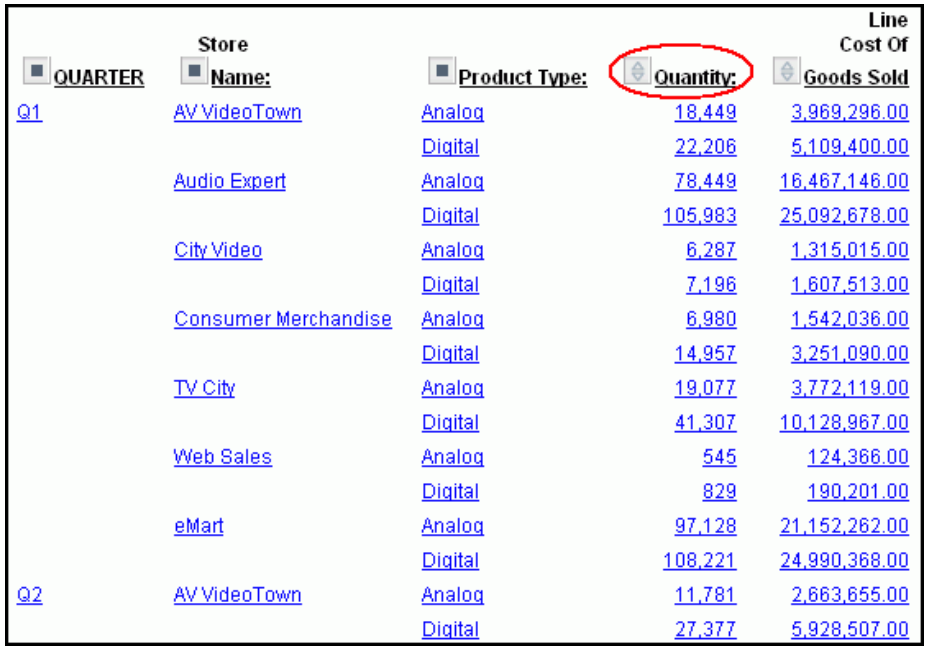
The following is an example of sorting a measure from high to low in the report.

1. Run the Standard Report *OLAPREP2*.

The OLAP report shows sales information sorted by quarter, store, and product type.

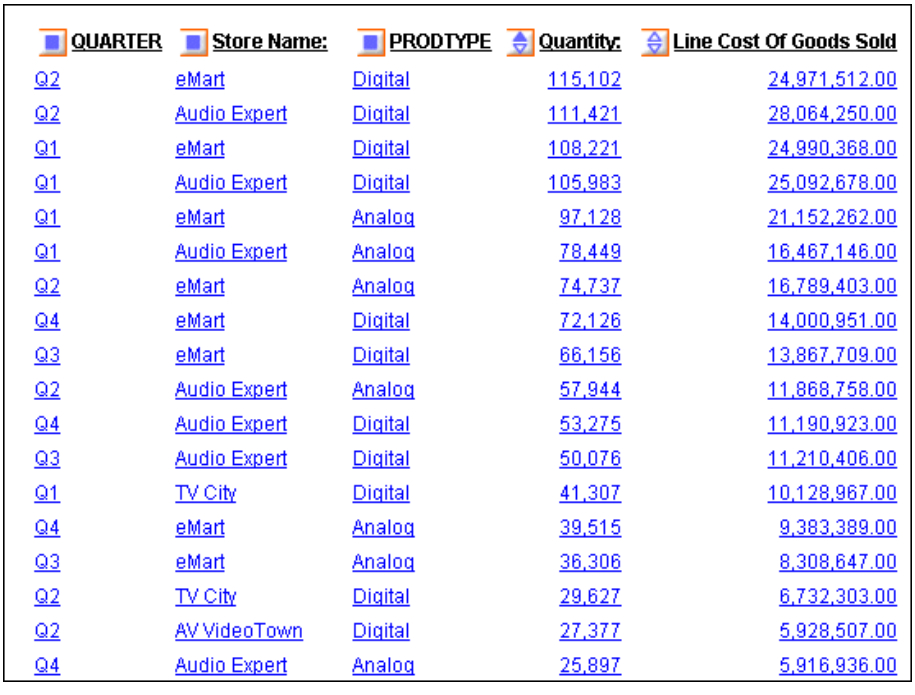
You are interested in seeing where the greatest quantity of goods have been sold.

2. Click the top half of the diamond button next to the Quantity measure, as shown in the following image, to sort the values from high to low.



QUARTER	Store Name:	Product Type:	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	Analog	18,449	3,969,296.00
		Digital	22,206	5,109,400.00
	Audio Expert	Analog	78,449	16,467,146.00
		Digital	105,983	25,092,678.00
	City Video	Analog	6,287	1,315,015.00
		Digital	7,196	1,607,513.00
	Consumer Merchandise	Analog	6,980	1,542,036.00
		Digital	14,957	3,251,090.00
	TV City	Analog	19,077	3,772,119.00
		Digital	41,307	10,128,967.00
	Web Sales	Analog	545	124,366.00
		Digital	829	190,201.00
	eMart	Analog	97,128	21,152,262.00
		Digital	108,221	24,990,368.00
Q2	AV VideoTown	Analog	11,781	2,663,655.00
		Digital	27,377	5,928,507.00

As shown in the following image, the report now shows data values for the Quantity measure in descending order. The top half of the diamond next to Quantity is blue and solid to indicate the current sort order of the measure. This is now the controlling sort in the report. All other values are reordered correspondingly.



QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q2	eMart	Digital	115,102	24,971,512.00
Q2	Audio Expert	Digital	111,421	28,064,250.00
Q1	eMart	Digital	108,221	24,990,368.00
Q1	Audio Expert	Digital	105,983	25,092,678.00
Q1	eMart	Analog	97,128	21,152,262.00
Q1	Audio Expert	Analog	78,449	16,467,146.00
Q2	eMart	Analog	74,737	16,789,403.00
Q4	eMart	Digital	72,126	14,000,951.00
Q3	eMart	Digital	66,156	13,867,709.00
Q2	Audio Expert	Analog	57,944	11,868,758.00
Q4	Audio Expert	Digital	53,275	11,190,923.00
Q3	Audio Expert	Digital	50,076	11,210,406.00
Q1	TV City	Digital	41,307	10,128,967.00
Q4	eMart	Analog	39,515	9,383,389.00
Q3	eMart	Analog	36,306	8,308,647.00
Q2	TV City	Digital	29,627	6,732,303.00
Q2	AV VideoTown	Digital	27,377	5,928,507.00
Q4	Audio Expert	Analog	25,897	5,916,936.00

Tip: To invert the sort order, click either the solid or hollow part of the diamond button.

Procedure: How to Sort Measures High to Low/Low to High From the Control Panel

1. Open the OLAP Control Panel.
2. Click a measure in the Measures pane to open the sort options pane (do not click the Measures check pane which controls the display of a measure, not its sorting).

   Verify that the Sort panel is checked (this setting is required to apply sorting specifications to the selected measure).
3. Select the *High to Low* or *Low to High* options button to specify the sort order you wish to apply. The default sort order is high to low.
4. Click *OK*.

   The sort pane is replaced by the Measures pane, where the measure becomes blue to indicate that sorting specifications have been defined.

5. Click *Run* to display the report with sorting applied to the selected measure.

   The diamond button next to the sorted measure changes to reflect the sort order. If high to low, the top half of the diamond is solid blue. If low to high, the bottom half is solid blue.

Note:

- Report execution is automatic when you sort a measure in an OLAP report. However, if the Control Panel is open, all current changes in the Control Panel are applied.
- If an OLAP request contains a horizontal (Across) sort field, the measures appear several times in the report, once for each Across value. If you apply sorting to a measure, the sort is performed on the first column occurrence of the measure, and reflected in all subsequent instances. The appropriate half of the diamond button becomes solid only for the first instance. Any additional sorting you wish to perform must be done from the first occurrence of the measure.

Procedure: How to View a Subset of Data for Sorted Measures

You can select to view only a subset of the total number of records in your report.

1. Open the OLAP Control Panel.
2. Click a measure name in the Measures pane to open the sort options pane (do not click the Measures check pane which controls the display of a measure, not its sorting).

   Verify that the *Sort* check panel is selected (this setting is required to apply sorting specifications to a measure).

3. Select the *Rank* check pane, then specify the number of sort field values to be included in the report.

   - Use the spin buttons located to the right of the word Highest or Lowest to increase or decrease the number of sort fields.

     or

   - Position the cursor in the input pane and type a number.

   The default number of sort fields values is 5.

4. Click *OK*.

   The sort pane is replaced by the Measures pane, where the measure becomes blue to indicate that sorting specifications have been defined.

5. Click *Run* to display the report with the designated number of sorted values.

Example: Displaying a Subset of Sorted Data for a Measure

The following is an example of displaying a subset of sorted data for a measure.

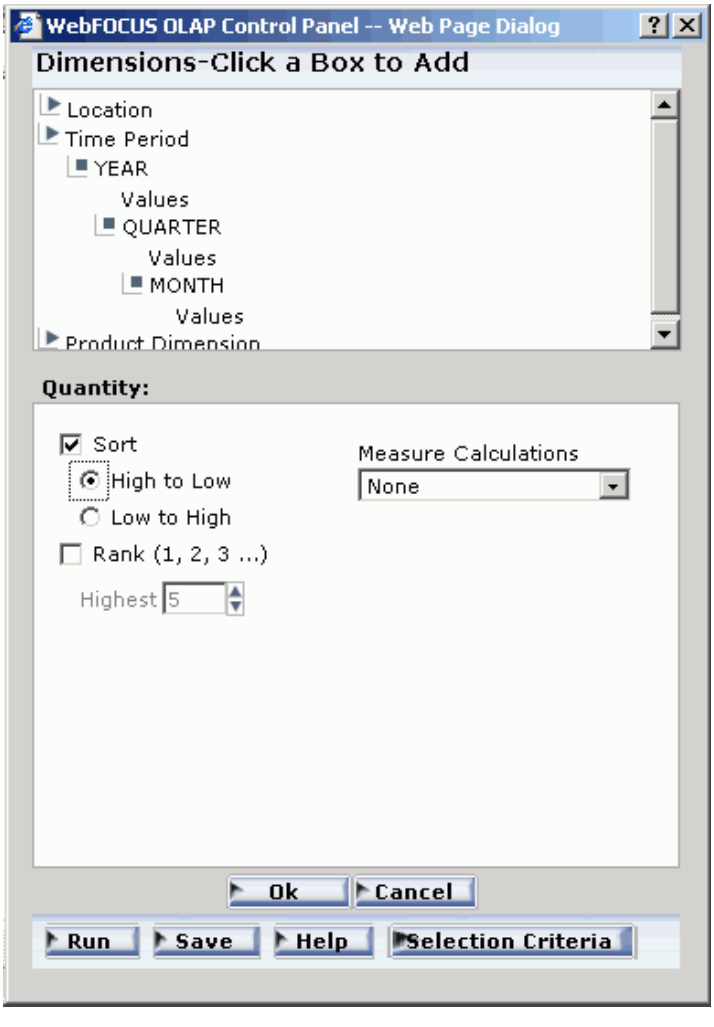
1. Run the Standard Report *OLAPREP2*.

   The report shows sales information sorted by quarter, store, and product type.

2. Click the square icon next to QUARTER to open the Control Panel (notice that the original report is open on the left).

3. Click *Quantity* in the Measures pane.

   The sort pane opens, as shown in the following image, in front of the report.



4. If not already selected, click the *Sort* check pane.

   High to low sorting is selected by default.

5. Click the *Rank* check pane.

   Because the report is being sorted from high to low, you can indicate the number of values you wish to see, beginning with the highest.

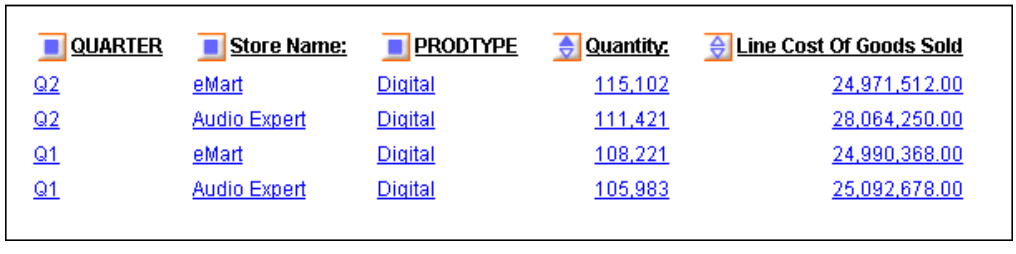
6. Specify Highest *4*.

7. Click *OK*.

   The main Control Panel window appears. In the Measures pane the Quantity measure is blue to indicate that sorting specifications have been defined.

8. Click the *Run* button at the bottom of the Control Panel.

   As shown in the following image, the report now shows Quantity sorted from high to low with the highest four values appearing.



QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q2	eMart	Digital	115,102	24,971,512.00
Q2	Audio Expert	Digital	111,421	28,064,250.00
Q1	eMart	Digital	108,221	24,990,368.00
Q1	Audio Expert	Digital	105,983	25,092,678.00

Procedure: How to Remove Sorting Criteria for a Measure

You can remove sorting specifications for a measure whether the measure appears or is hidden.

1. Open the OLAP Control Panel.
2. In the Measures pane, click the measure for which you want to remove sorting specifications.
3. Clear the *Sort* check pane.
4. Click *OK*.

Sorting Dimensions

How to:

Change Sort Order for a Dimension

Restrict the Display of Sort Values

Rank Rows in a Vertically Sorted Report

Reposition Sort Fields in an OLAP Report

Reposition Sort Fields From the Control Panel

Hide a Sort Field

Pivot Rows and Columns In an OLAP Report

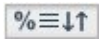
Pivot Rows and Columns From the Control Panel

Sort by a Field Without Displaying the Sort Column

There are several ways in which you can sort dimensions in an OLAP hierarchy. You can:

- Control the order in which data is sorted: ascending or descending.
- Restrict sort field values to a specified number of either highest or lowest values.
- Assign a rank number to each row in a vertically sorted report.
- Shift the positions of sort fields in the report. For example, you can change from sorting by State and then by Product to sorting by Product and then by State.
- Pivot a vertical (By) sort field to make it a horizontal (Across) sort field and vice versa.
- Hide a sort field in the report while retaining the sorting associated with it. For example, you can sort data by quarters without showing the Quarter column.
- Group numeric data in tiles (for example, percentile, decile, and so on).

Procedure: How to Change Sort Order for a Dimension

1. Open the Control Panel.
2. Select a field from the Drill Down or Drill Across pane.
3. Click the *Sort*  button.

   The sort pane opens.

4. Under Sort Order, choose the *Low to High* or *High to Low* options button (Low to High is the default for a dimension).
5. Click *OK*.

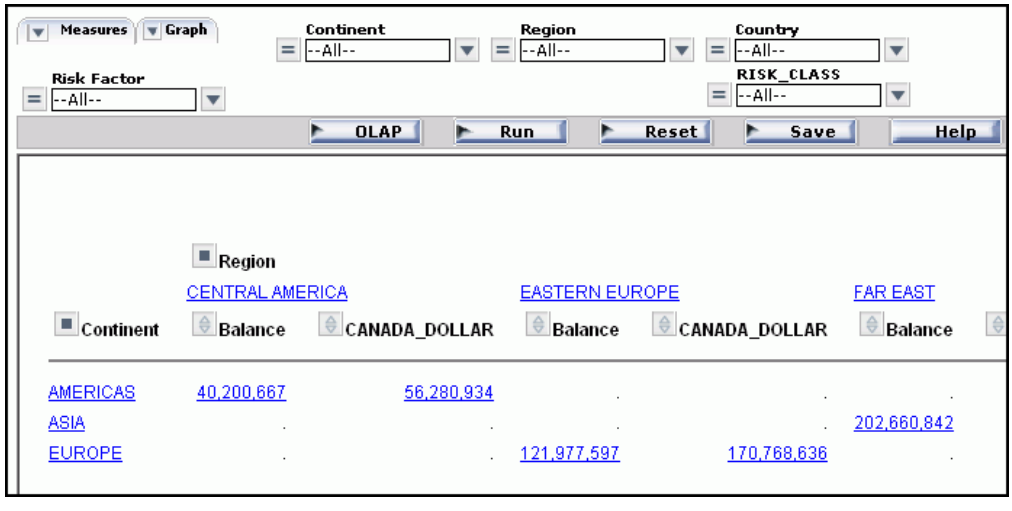
   The main Control Panel window reopens.
6. Click *Run* to execute the report.

Example: Inverting the Sort Order of a Dimension

The following is an example of inverting the sort order of a dimension.

1. Run the Standard Report *OLAPREP4*.

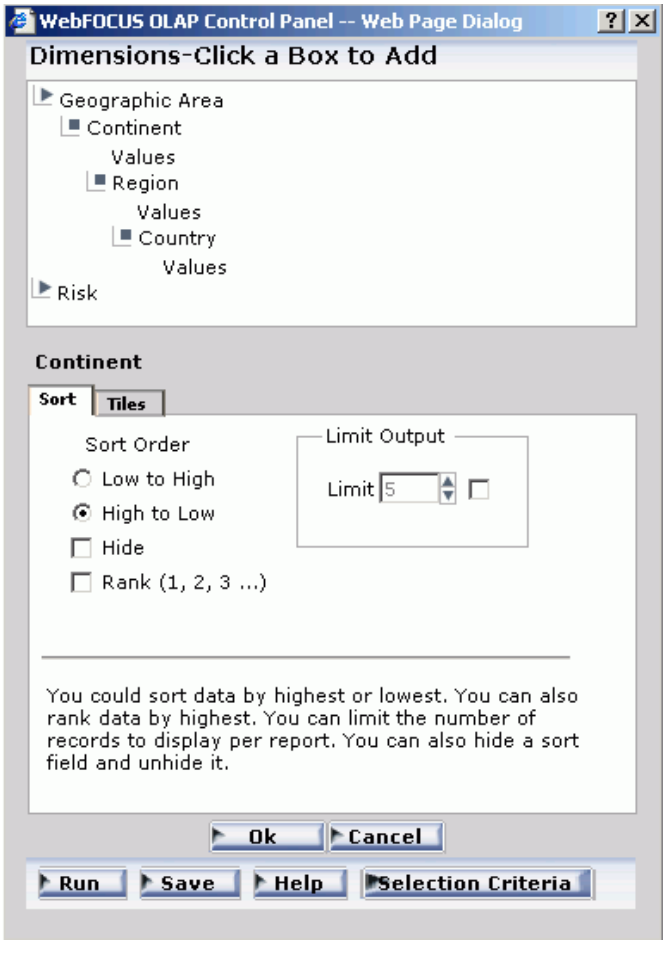
   In the report, the values of both sort fields (Continent and Region) are sorted from low to high (A to Z), as shown in the following image.



2. To sort the report in reverse alphabetical order, click the *OLAP* button on the band below the Selections pane to open the Control Panel.
3. Select *Continent* in the Drill Down pane and click the *Sort* button.

   The sort pane opens.

4. Under Sort Order, choose the *High to Low* options button, as shown in the following image, on the OLAP Control Panel.



5. Click *OK*.

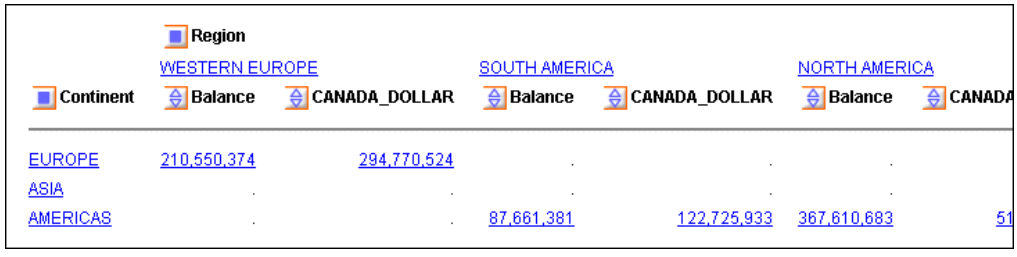
   The main Control Panel window reopens.

6. Repeat the process for Region: select *Region* in the Drill Across pane and click the *Sort* button. When the sort pane opens, select the *High to Low* options button and click *OK*.

   The main Control Panel window opens.

7. Click the *Run* button.

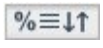
Both dimensions are now sorted in inverse alphabetical order (Z to A), as shown in the following image.



Region	WESTERN EUROPE		SOUTH AMERICA		NORTH AMERICA	
Continent	Balance	CANADA_DOLLAR	Balance	CANADA_DOLLAR	Balance	CANADA
EUROPE	210,550,374	294,770,524	.	.	.	
ASIA	.	.	.	.	.	
AMERICAS	.	.	87,661,381	122,725,933	367,610,683	51

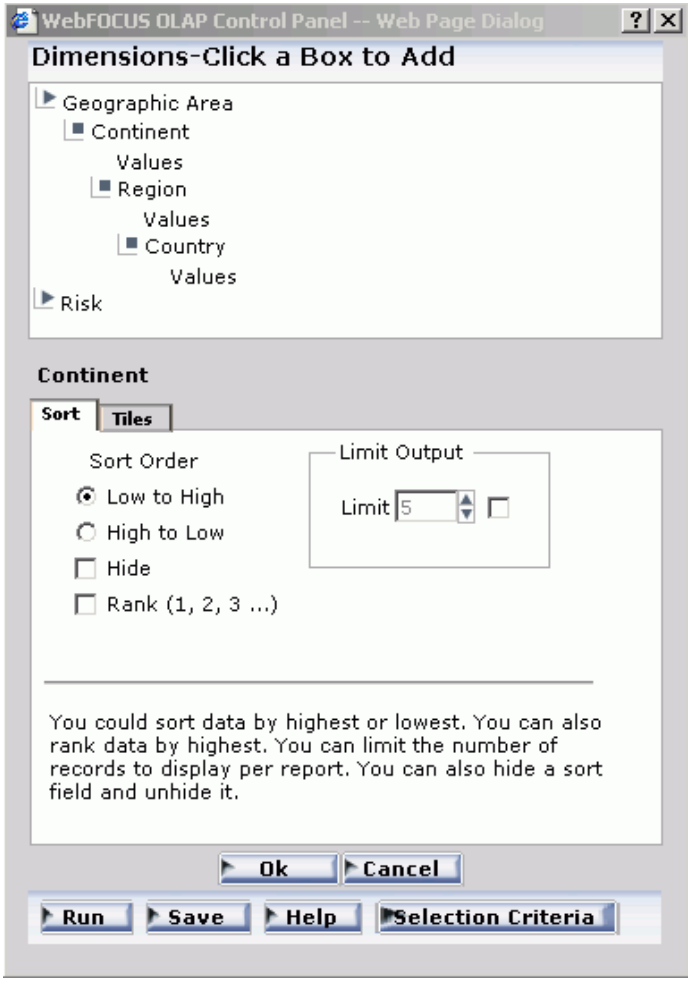
Procedure: How to Restrict the Display of Sort Values

To restrict the display of sort field values to a certain number of highest or lowest values:

1. Open the OLAP Control Panel.
2. Select a field from the Drill Down pane.
3. Click the *Sort*  button.

   The sorting pane opens.

4. Under Sort Order, choose the *Low to High* or *High to Low* options button, as shown in the following image, on the OLAP Control Panel.



5. Under Limit Output, click the *Limit* check pane and choose or type a value in the input area.

6. Click *OK*.

   The main Control Panel window reopens.

7. Click *Run* to execute your report.

Procedure: How to Rank Rows in a Vertically Sorted Report

1. Open the OLAP Control Panel.
2. Select a field from the Drill Down pane.
3. Click the *Sort* button.

   The sort pane opens.
4. Under Sort Order, choose the *Low to High* or *High to Low* options button.
5. Click the *Rank* check pane.
6. If you wish to place a restriction on the number of sort field values to rank, click the *Limit* check pane, and choose or type a value in the input area.

   - If the *High to Low* option button is selected, you can rank a specified number of Highest values.
   - If the *Low to High* option button is selected, you can rank a specified number of Lowest values.
7. Click *OK*.

   The main Control Panel window reopens.
8. Click *Run* to execute your report.

Example: Ranking and Restricting the Number of Sort Values

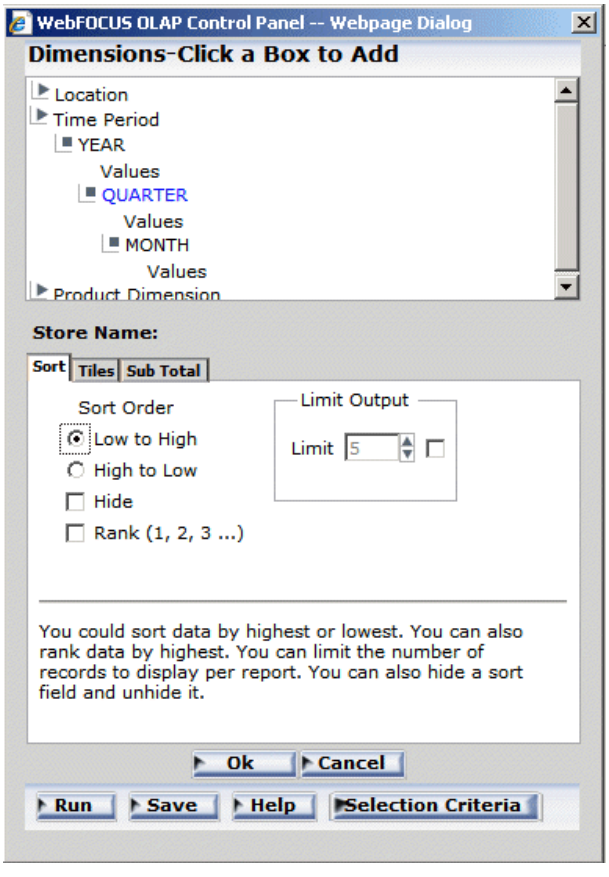
The following is an example of ranking and restricting the number of sort values.

1. Run the Standard Report *OLAPREP2*.

   Information for all stores is shown for each quarter. You want to see quarterly information for only the first two stores in alphabetical order (low to high).
2. Click the square icon next to QUARTER to open the Control Panel (notice that the original report is open at the left).
3. Choose *Store Name* in the Drill Down pane and click the *Sort* button.

   The sort pane opens.

The following image shows these three selections on the OLAP Control Panel.



a. Accept the default sort order: *Low to High*.

b. Click the *Limit* check pane and choose *2* from the input area.

c. Click the *Rank* check pane.

4. Click *OK* to return to the main Control Panel window.

5. Click the *Run* button at the bottom of the Control Panel.

Notice that only two values now appear for each Quarter and ranked low to high within each group, as shown in the following image.

QUARTER	RANK	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q1	1	AV VideoTown	Analog	18,449	3,969,296.00
			Digital	22,206	5,109,400.00
	2	Audio Expert	Analog	78,449	16,467,146.00
			Digital	105,983	25,092,678.00
Q2	1	AV VideoTown	Analog	11,781	2,663,655.00
			Digital	27,377	5,928,507.00
	2	Audio Expert	Analog	57,944	11,868,758.00
			Digital	111,421	28,064,250.00
Q3	1	AV VideoTown	Analog	7,700	1,792,498.00
			Digital	17,379	3,625,972.00
	2	Audio Expert	Analog	19,508	4,216,289.00
			Digital	50,076	11,210,406.00
Q4	1	AV VideoTown	Analog	7,761	1,844,696.00
			Digital	21,915	4,553,762.00
	2	Audio Expert	Analog	25,897	5,916,936.00
			Digital	53,275	11,190,923.00

Procedure: How to Reposition Sort Fields in an OLAP Report

You can change the order in which data is sorted and presented in the report. For example, you can change from sorting by State and then by Product to sorting by Product and then by State. If you want to reposition:

- Vertical (By) sort fields, drag and drop a field into a new column position.
- Horizontal (Across) sort fields, drag and drop the lower field above the higher one or the higher field above the lower one.

In each case, the cursor changes to a plus sign (+) to indicate acceptable places into which you can drop the field. Unacceptable positions are shown by a circle with a slash across the center.

Example: Repositioning Sort Fields in an OLAP Report

The following is an example of repositioning sort fields in an OLAP report.

1. Run the Standard Report *OLAPREP2*.
2. Click the top half of the diamond button next to *Quantity* to sort values from high to low.

The dimension values adjust accordingly. The report now shows the Quantity values from high to low but according to the QUARTER sort order, as shown in the following image.

QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q2	eMart	Digital	115,102	24,971,512.00
Q2	Audio Expert	Digital	111,421	28,064,250.00
Q1	eMart	Digital	108,221	24,990,368.00
Q1	Audio Expert	Digital	105,983	25,092,678.00

You would like to change the sort order in the report, making Store Name the first sort field, followed by PRODTYPE and QUARTER.

3. Drag *QUARTER* after PRODTYPE.

   The cursor changes to a plus sign (+) to indicate acceptable places into which you can drop the field.

   The report changes immediately, as shown in the following image, with the Store Name being the first sort order.

Store Name:	PRODTYPE	QUARTER	Quantity:	Line Cost Of Goods Sold
eMart	Digital	Q2	115,102	24,971,512.00
Audio Expert	Digital	Q2	111,421	28,064,250.00
eMart	Digital	Q1	108,221	24,990,368.00
Audio Expert	Digital	Q1	105,983	25,092,678.00

Procedure: How to Reposition Sort Fields From the Control Panel

1. Open the OLAP Control Panel.
2. Select a field in the Drill Down or Drill Across pane.
3. Click the *Shift Up* or *Shift Down* arrow until the field is in the desired position.

   Repeat for other fields as needed.
4. Click *Run* to execute your report.

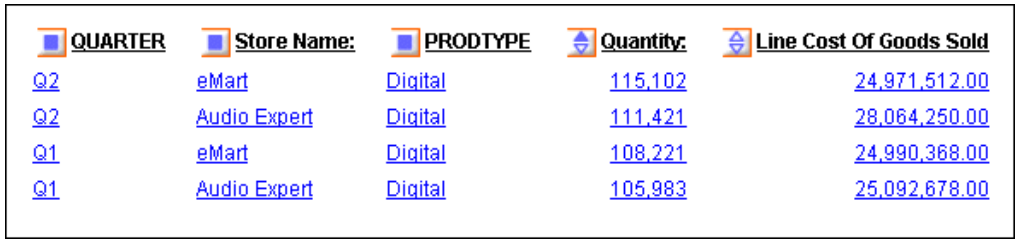
Example: Repositioning Sort Fields From the Control Panel

The following is an example of repositioning sort fields from the Control Panel.

1. Run the Standard Report *OLAPREP2*.

2. Click the top half of the diamond button next to Quantity to sort values from high to low.

   The dimension values adjust accordingly. The report now shows the Quantity values from high to low but according to the QUARTER sort order, as shown in the following image.

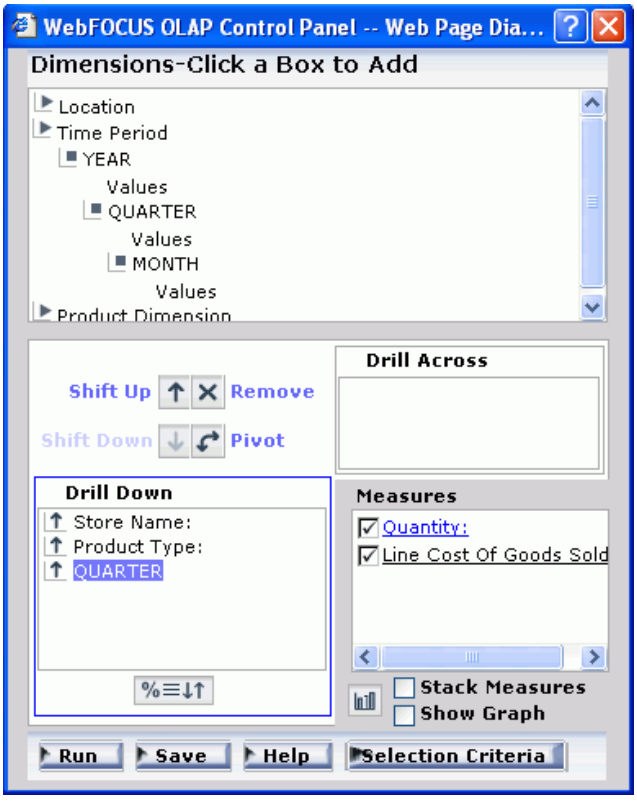


QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q2	eMart	Digital	115,102	24,971,512.00
Q2	Audio Expert	Digital	111,421	28,064,250.00
Q1	eMart	Digital	108,221	24,990,368.00
Q1	Audio Expert	Digital	105,983	25,092,678.00

   You would like to change the sort order in the report, making Store Name the first sort field, followed by PRODTYPE and QUARTER.

3. Click the square icon button next to QUARTER to open the Control Panel.
4. Select *Quarter* from the Drill Down pane.
5. Click the *Shift Down* arrow twice.

QUARTER is now the third item in the Drill Down list, as shown in the following image.



6. Click the *Run* button at the bottom of the Control Panel.

QUARTER appears in the third column of the report, as shown in the following image.

Store Name:	PRODTYPE	QUARTER	Quantity:	Line Cost Of Goods Sold
eMart	Digital	Q2	115,102	24,971,512.00
Audio Expert	Digital	Q2	111,421	28,064,250.00
eMart	Digital	Q1	108,221	24,990,368.00
Audio Expert	Digital	Q1	105,983	25,092,678.00

Procedure: How to Hide a Sort Field

In OLAP, you can hide a sort field by clicking the *Hide* check box in a report.

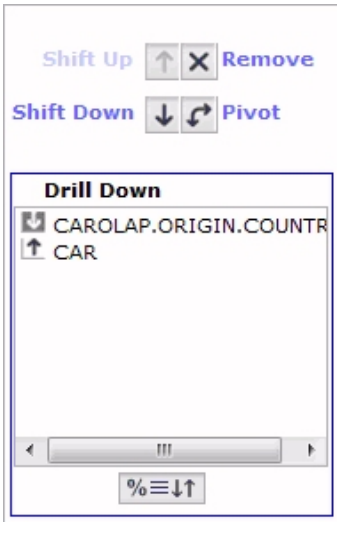
Note: In past releases, the text "(hidden)" was displayed to the right of the field name in the Drill Down pane in the OLAP Control Panel. Beginning with Version 7 Release 7.02, hidden sort fields are indicated by reversing the color of the icon that appears at the left of the field name.

1. Enter the following code in an ad hoc page.

```
-OLAP ON
TABLE FILE CAROLAP
SUM CAROLAP.BODY.DEALER_COST
CAROLAP.BODY.RETAIL_COST
BY CAROLAP.ORIGIN.COUNTRY
BY CAR
END
```

2. Open the OLAP Control Panel.
3. Double-click on the *Country* field in the Drill Down panel of the OLAP Control Panel. In the resulting window panel, select the *Hide* check box.
4. Click *OK*.

   Notice that the color of the sort icon has been reversed. The Drill Down panel now appears as shown in the following image.



Procedure: How to Pivot Rows and Columns In an OLAP Report

You can quickly change a field from one that sorts data vertically, creating rows, to one that sorts data horizontally, creating columns, or vice versa.

To change a:

- Vertical (By) sort field to a horizontal (Across) sort field, drag and drop a field above the row of column titles.
- Horizontal (Across) sort field to a vertical (By) sort field, drag and drop the field into the desired location in the row of column titles.

In each case, the cursor changes to a plus sign (+) to indicate acceptable places where you can drop the field. Unacceptable places have a circle with a slash across the center.

Example: Pivoting Rows and Columns in a Report

The following is an example of pivoting rows and columns in a report.

1. Run the Standard Report *OLAPREP2*.
2. Click *Q1*.

   The report is now sorted vertically, by month, store, and product type, as shown in the following image.

MONTH	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
01	AV VideoTown	Analog	147	35,280.00
		Digital	1,426	299,504.00
	Audio Expert	Analog	11,061	2,281,228.00
		Digital	14,062	3,432,741.00
	City Video	Analog	1,097	199,968.00
		Digital	1,382	339,594.00
	Consumer Merchandise	Analog	1,801	369,868.00
		Digital	3,580	800,913.00
	TV City	Analog	3,257	683,014.00
		Digital	6,281	1,470,194.00
	Web Sales	Analog	86	18,889.00
		Digital	136	33,877.00
	eMart	Analog	6,407	1,282,935.00
		Digital	10,737	2,632,355.00
02	AV VideoTown	Analog	9,124	1,982,103.00
		Digital	10,823	2,331,172.00
	Audio Expert	Analog	34,413	7,254,037.00
		Digital	39,905	9,674,622.00
	City Video	Analog	576	145,184.00
		Digital	805	136,405.00

You want to create a matrix in which data is sorted horizontally by month, and vertically by store and product type.

3. Drag *Month* above the report to sort data horizontally (Across).

   The cursor changes to a plus sign (+) to indicate acceptable places where you can drop the field.

   In the new report, Quantity and Line Cost of Goods Sold are repeated horizontally for each month, as shown in the following image.

		MONTH			
		01		02	
Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold	Quantity:	Line Cost Of Goods Sold
AV VideoTown	Analog	147	35,280.00	9,124	1,982,103.00
	Digital	1,426	299,504.00	10,823	2,331,172.00
Audio Expert	Analog	11,061	2,281,228.00	34,413	7,254,037.00
	Digital	14,062	3,432,741.00	39,905	9,674,622.00
City Video	Analog	1,097	199,968.00	576	145,184.00
	Digital	1,382	339,594.00	805	136,405.00
Consumer Merchandise	Analog	1,801	369,868.00	2,835	639,082.00
	Digital	3,580	800,913.00	3,232	766,052.00
TV City	Analog	3,257	683,014.00	7,959	1,466,033.00
	Digital	6,281	1,470,194.00	14,269	3,761,723.00
Web Sales	Analog	86	18,889.00	165	37,831.00
	Digital	136	33,877.00	204	47,392.00
eMart	Analog	6,407	1,282,935.00	44,944	9,869,545.00
	Digital	10,737	2,632,355.00	42,786	9,826,681.00

Procedure: How to Pivot Rows and Columns From the Control Panel

You can change a field from one that sorts data vertically, creating rows, to one that sorts data horizontally, creating columns, or vice versa.

1. Open the OLAP Control Panel.
2. Select the title of the row or column you want to pivot in the Drill Down or Drill Across pane.
3. Click the *Pivot* button. The title appears in the new location.
4. Click *Run* to execute your report.

Example: Pivoting Rows Into Columns From the Control Panel

The following is an example of pivoting rows into columns from the Control Panel.

1. Run the Standard Report *OLAPREP2*.
2. Click *Q1*.

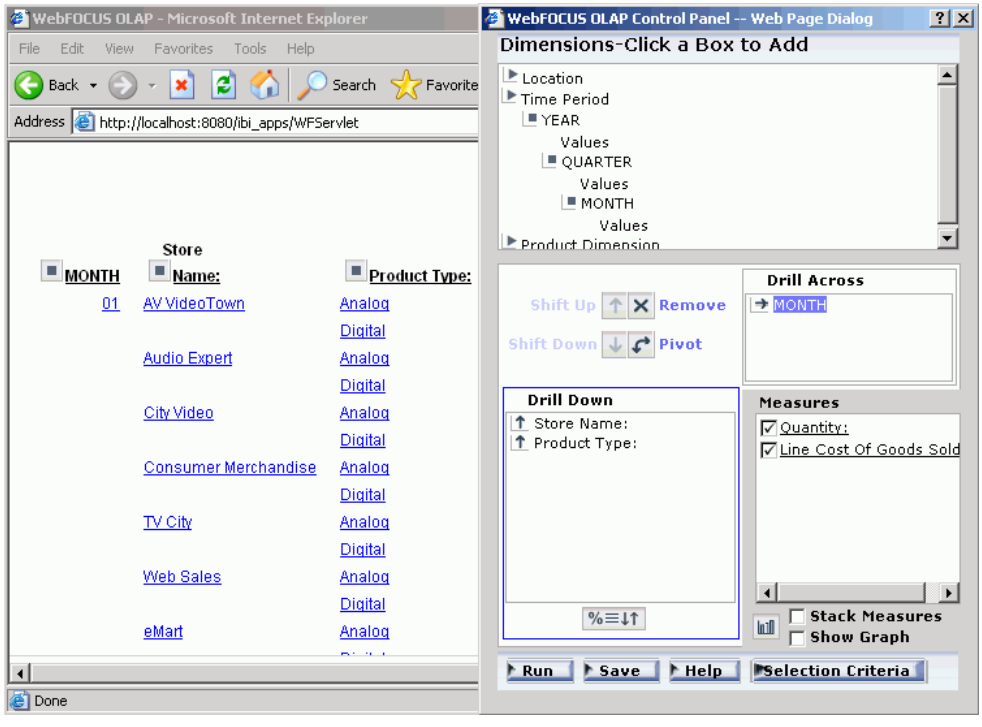
   The report is now sorted vertically, by month, store, and product type, as shown in the following image.

MONTH	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
01	AV VideoTown	Analog	147	35,280.00
		Digital	1,426	299,504.00
	Audio Expert	Analog	11,061	2,281,228.00
		Digital	14,062	3,432,741.00
	City Video	Analog	1,097	199,968.00
		Digital	1,382	339,594.00
	Consumer Merchandise	Analog	1,801	369,868.00
		Digital	3,580	800,913.00
	TV City	Analog	3,257	683,014.00
		Digital	6,281	1,470,194.00
	Web Sales	Analog	86	18,889.00
		Digital	136	33,877.00
	eMart	Analog	6,407	1,282,935.00
		Digital	10,737	2,632,355.00
02	AV VideoTown	Analog	9,124	1,982,103.00
		Digital	10,823	2,331,172.00
	Audio Expert	Analog	34,413	7,254,037.00
		Digital	39,905	9,674,622.00
	City Video	Analog	576	145,184.00
		Digital	805	136,405.00

   You want to create a matrix in which data is sorted horizontally by month, and vertically by store and product type.

3. Click the square icon next to MONTH to open the Control Panel.
4. Select *Month* in the Drill Down pane and click the *Pivot* button.

Month moves into the Drill Across pane, as shown in the following image.



5. Click the *Run* button on the Control Panel.

In the new report, Quantity and Line Cost of Goods Sold are repeated horizontally for each month, as shown in the following image.

		MONTH			
		01		02	
Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold	Quantity:	Line Cost Of Goods Sold
AV VideoTown	Analog	147	35,280.00	9,124	1,982,103.00
	Digital	1,426	299,504.00	10,823	2,331,172.00
Audio Expert	Analog	11,061	2,281,228.00	34,413	7,254,037.00
	Digital	14,062	3,432,741.00	39,905	9,674,622.00
City Video	Analog	1,097	199,968.00	576	145,184.00
	Digital	1,382	339,594.00	805	136,405.00
Consumer Merchandise	Analog	1,801	369,868.00	2,835	639,082.00
	Digital	3,580	800,913.00	3,232	766,052.00
TV City	Analog	3,257	683,014.00	7,959	1,466,033.00
	Digital	6,281	1,470,194.00	14,269	3,761,723.00
Web Sales	Analog	86	18,889.00	165	37,831.00
	Digital	136	33,877.00	204	47,392.00
eMart	Analog	6,407	1,282,935.00	44,944	9,869,545.00
	Digital	10,737	2,632,355.00	42,786	9,826,681.00

Procedure: How to Sort by a Field Without Displaying the Sort Column

To use a field to sort your data, but not show the sort field as a column in the report:

1. Open the OLAP Control Panel.
2. Select a field in the Drill Down or Drill Across pane.
3. Click the *Sort* %≡↓↑ button.

   The sort pane opens.
4. Under Sort Order, click the *Hide* check pane.
5. Click *OK*.

   The main Control Panel window reopens.
6. Click *Run* to execute the report.

Tip: To expose the hidden sort field, repeat the process and deselect the *Hide* check pane.

Example: Sorting by a Hidden Field

The following is an example of sorting by a hidden field.

1. Run the Standard Report *OLAPREP2*.

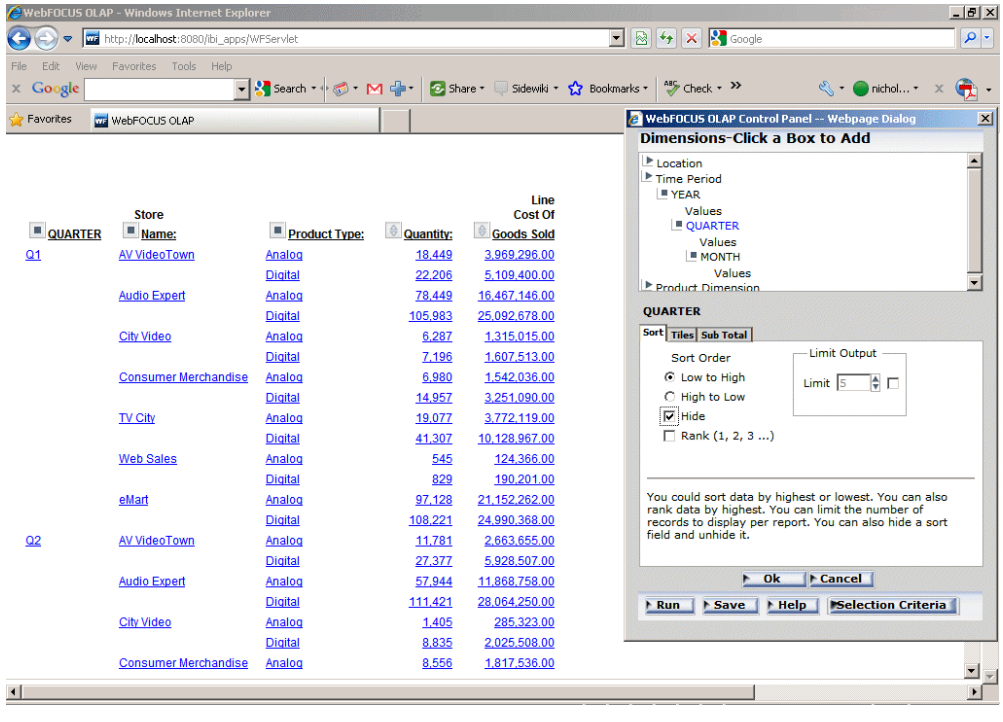
   The first sort field in the report is QUARTER. You want to retain the sorting but not display this field.

2. Click the square icon next to QUARTER to open the Control Panel.

3. Select *QUARTER* in the Drill Down pane, then click the *Sort* button.

   The sort pane opens.

4. Select the *Hide* check pane, as shown in the following image.



5. Click *OK*.

   The main Control Panel window reopens.

6. Click the *Run* button in the Control Panel.

Report sorting is unchanged, but the QUARTER column no longer appears, as shown in the following image.

Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
AV VideoTown	Analog	18,449	3,969,296.00
	Digital	22,206	5,109,400.00
Audio Expert	Analog	78,449	16,467,146.00
	Digital	105,983	25,092,678.00
City Video	Analog	6,287	1,315,015.00
	Digital	7,196	1,607,513.00
Consumer Merchandise	Analog	6,980	1,542,036.00
	Digital	14,957	3,251,090.00
TV City	Analog	19,077	3,772,119.00
	Digital	41,307	10,128,967.00
Web Sales	Analog	545	124,366.00
	Digital	829	190,201.00
eMart	Analog	97,128	21,152,262.00
	Digital	108,221	24,990,368.00
AV VideoTown	Analog	11,781	2,663,655.00
	Digital	27,377	5,928,507.00

Grouping Numeric Data Into Tiles

How to:

Group Data Into Tiles in an OLAP Report

You can group numeric data into any number of tiles (percentiles, deciles, quartiles, and so on) in tabular reports. For example, you can group student test scores into deciles to determine which students are in the top ten percent of the class.

Grouping is based on the values in the selected vertical (BY) field and data is apportioned into the number of tile groups you specify.

The following occurs when you group data into tiles:

- A new column (labeled TILE by default) is added to the report output and displays the tile number assigned to each instance of the tile field. You can change the column title in the Tiles section of the OLAP Control Panel.

- Tiling is calculated within all of the higher-level sort fields in the request and restarts whenever a sort field at a higher level than the tile field value changes.
- Instances are counted using the tile field. If the request displays fields from lower level segments, there may be multiple report lines that correspond to one instance of the tile field.
- Instances with the same tile field value are placed in the same tile. For example, consider the following data, which is to be apportioned into three tiles:

  1

  5

  5

  5

  8

  9

  In this case, dividing the instances into groups containing an equal number of records produces the following table:

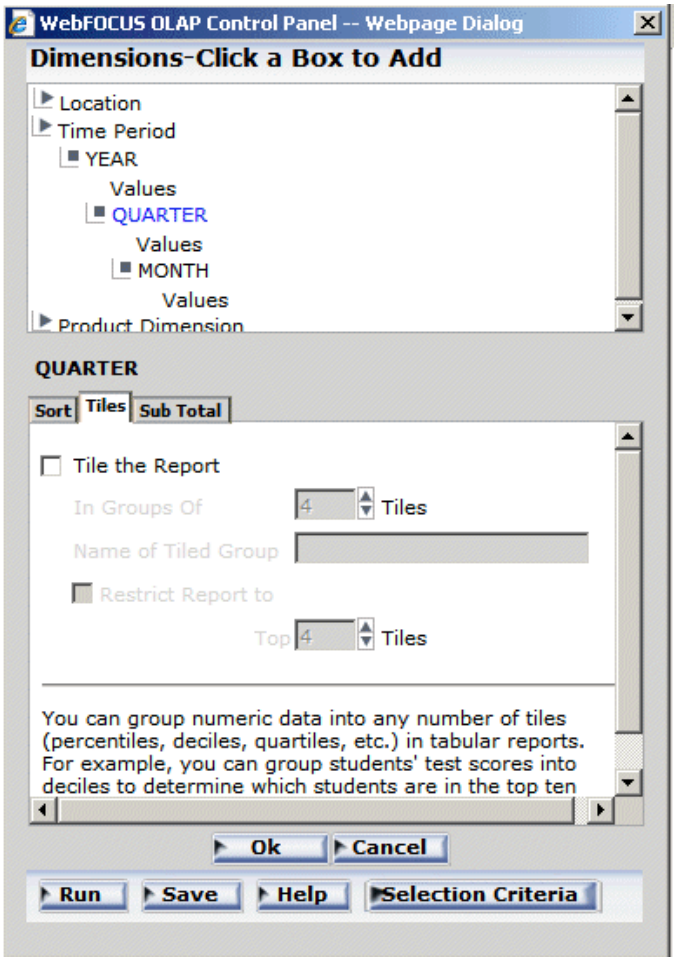
Group	Data Values
1	1,5
2	5,5
3	8,9

  However, because all of the same data values must be in the same tile, the fives (5) that are in group 2 are moved to group 1. Group 2 remains empty. The final tiles look like the following table:

Tile Number	Data Values
1	1,5,5,5
2	
3	8,9

Procedure: How to Group Data Into Tiles in an OLAP Report

1. Open the OLAP Control Panel.
2. Select a numeric or date field from the Drill Down pane.
3. Click the *Sort* button. Click the *Tiles* tab.



4. Click the *Tile the Report* check pane.
5. In the *In Groups Of* input area, select the number of tiles to be used in grouping the data. For example, 100 tiles produces percentiles or 10 tiles produces deciles.
6. In the *Name of Tile Group* input pane, type a name for the Tile column.

7. In the *Restrict Report to only the Top* input area, select the number of tile groups to display in the report.
8. Optionally, select a Sort Order option button:
   - Choose *High to Low* to sort data in descending order so that the highest data values are placed in tile 1.
   - Choose *Low to High* to sort data in ascending order so that the lowest data values are placed in tile 1. This is the default.
9. If you wish to specify the highest tile value to appear in the report, select a value from the Limit input area. For example, if you enter a Limit of 3, the report will not display any data row that is assigned a tile number greater than 3.
10. Click *OK* to accept the selections and return to the main Control Panel window.
11. Click *Run* to reexecute and view the report.

Performing a Calculation on a Measure

How to:

Apply a Calculation to a Measure

Reference:

Calculations You Can Perform on a Measure

You can perform standard calculations, such as average, percent, and summarize, on the numeric data in measures on an OLAP report.

Procedure: How to Apply a Calculation to a Measure

1. Run the Standard Report.
2. Open the OLAP Control Panel.
3. Click a measure in the Measures pane.

   The sort options pane opens. Do not click the Measures check pane, which controls the display of a measure, not its sorting.
4. Click the arrow under Measure Calculations and select a calculation from the list.

   None is the default value. For details, see *Calculations You Can Perform on a Measure* on page 172.
5. Click *OK*.

The sort pane is replaced by the Measures pane, where the selected calculation appears as a prefix to the measure.

6. Click *Run*, and the applied calculation is added to the column title.

Reference: Calculations You Can Perform on a Measure

The following table lists the types of calculations in the first column and describes their functions in the second column.

Calculation	Function
`Average Sum of Squares`	Computes the average sum of squares for standard deviation in statistical analysis.
`Average`	Computes the average value of the field.
`Count`	Counts the number of occurrences of the field.
`Count Distinct`	Counts the number of distinct values within a field when using -REMOTE. For other modes of operation, this behaves like Count.
`Maximum`	Generates the maximum value of the field.
`Minimum`	Generates the minimum value of the field.
`Percent`	Computes the percent of a field based on the total values for the field. The Percent can be used with detail as well as summary fields.
`Percent Count`	Computes the percent of a field based on the number of instances found.
`Row`	Computes the percent of a field based on the total values for the field across a row.
`Summarize`	Sums the number of occurrences of the field.
`Total`	Counts the occurrences of the field for use in a heading (includes footings, subheads, and subfoots).

Example: Applying a Percent Calculation to a Measure

The following is an example of applying a percent calculation to a measure.

1. Run the Standard Report *OLAPREP6*.

   The report shows Quantity and Line Cost of Goods Sold sorted by plant and product category, with a subtotal at each sort break.

   You want to create a report column that shows the percent of total sales for each plant.

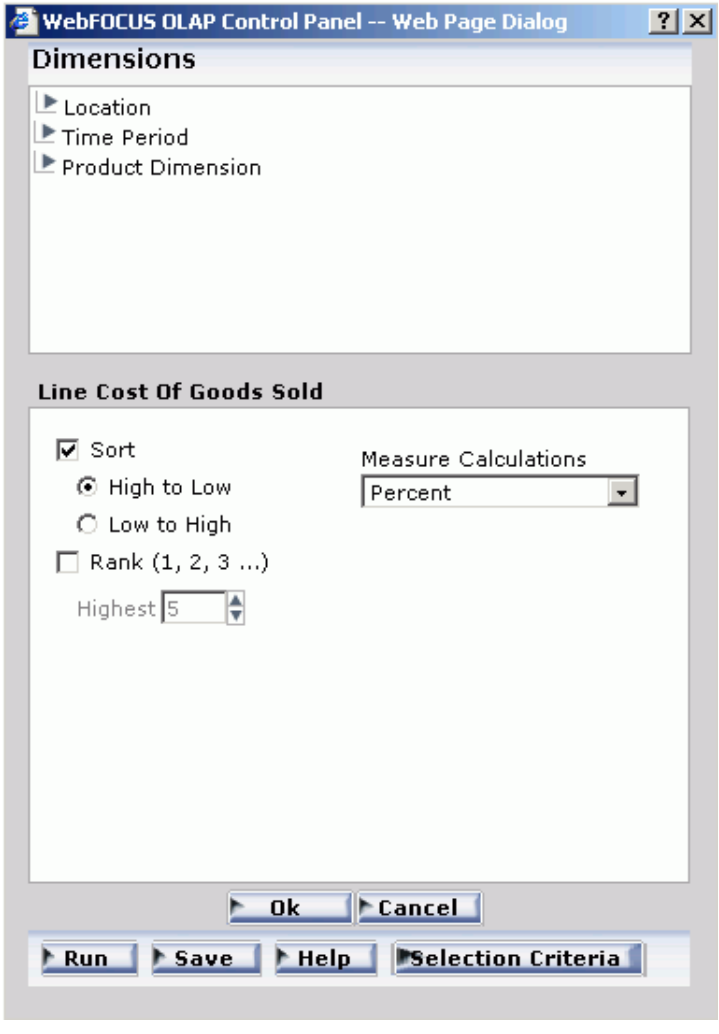
2. Click the square icon next to PLANT to open the Control Panel, as shown in the following report image.

PLANT	PRODCAT	Quantity:	Line Cost Of Goods Sold
Boston	CD Players	56,723	5,615,577.00
	Camcorders	172,592	55,400,795.00
	Cameras	21,554	1,985,822.00
	DVD	38,986	7,586,704.00
	Digital Tape Recorders	98,312	6,783,528.00
	PDA Devices	118,550	39,002,750.00
	VCRs	32,119	4,143,351.00
*TOTAL Boston		538,836	120,518,527.00
Dallas	CD Players	18,377	1,819,323.00
	Camcorders	64,712	19,836,296.00
	Cameras	6,496	686,960.00
	DVD	21,724	4,271,836.00
	Digital Tape Recorders	38,251	2,639,319.00
	PDA Devices	43,492	14,490,008.00
	VCRs	10,885	1,404,165.00
*TOTAL Dallas		203,937	45,147,907.00

3. Click *Line Cost of Goods Sold* in the Control Panel Measures pane.

   The sort pane opens.

4. Under Measures Calculations, choose *Percent* from the drop-down list, as shown in the following image, then click *OK* to see the calculation as a prefix for the measure in the Measures pane.



5. Click the *Run* button at the bottom of the Control Panel.

The report now breaks down sales for each product at each plant as a percentage of total sales, as shown in the following image.

PLANT	Product Category:	Quantity:	Percent Line Cost Of Goods Sold
Boston	Camcorders	172,592	16.42
*TOTAL Boston		172,592	16.42
St Louis	Camcorders	135,629	12.55
*TOTAL St Louis		135,629	12.55
Boston	PDA Devices	118,550	11.56
*TOTAL Boston		118,550	11.56
St Louis	PDA Devices	84,158	8.24
*TOTAL St Louis		84,158	8.24
Orlando	Camcorders	69,611	6.49
*TOTAL Orlando		69,611	6.49
Dallas	Camcorders	64,712	5.88

Notice that the subtotals have been removed from the report because the breakdown by plant is no longer suitable for the data.

Limiting Data

In this section:

Applying Selection Criteria to Date Elements

How to:

Apply Selection Criteria From the Selections Pane

Apply Selection Criteria From the Control Panel

Change Selection Criteria From the Control Panel

Remove Selection Criteria From the Control Panel

Reference:

Selection Criteria Relational Operators

An OLAP report is limited to values belonging to the parent categories in the dimensions hierarchy. There are several ways to further limit the data that appears in the report.

From the Selections pane or the Control Panel, you can explicitly limit the data in an OLAP report by selecting dimension values and relational operators (such as =, >, <). For a list of the relational operators, see *Selection Criteria Relational Operators* on page 176.

The Selections pane provides the easiest approach since you can choose both dimension values and relational operators with a few mouse clicks, while the report is fully exposed to view.

Changes made in the Selections pane are implemented immediately in the Control Panel (even if the Control Panel is closed), and changes made in the Control Panel are reflected immediately in the Selections pane.

From the report, you can limit data indirectly by drilling down on measures and dimensions to hone in on a subset of information. For details, see *Drilling Down On Dimensions and Measures* on page 131.

Reference: Selection Criteria Relational Operators

You can define selection criteria in the Selections pane or Control Panel using several relational operators, which are shown in the following tables. The first column displays the operator and the second column provides a description of the operator.

Operator	Displays Records That...
- **Equal to**	Are equal to the criteria you specified. This is the default operator.
- **Not Equal to**	Are not equal to the criteria you specified.
- **Less than or equal to**	Are less than or equal to the criteria you specified.
- **Less than**	Are less than, but not equal to, the criteria you specified.
- **Greater than or equal to**	Are greater than or equal to the criteria you specified.
- **Greater than**	Are greater than, but not equal to, the criteria you specified.
- **Contains**	Contain the criteria you specified. **Note:** This operator is available only for alphanumeric fields.
- **Not contain**	Do not contain the criteria you specified. **Note:** This operator is available only for alphanumeric fields.

Note: You can select more than one value using the same relational operator.

The following table lists and describes relational operators that are available for selecting a range of dates.

Operator	Displays Records Where...
R - **Within range**	The value in the indicated date field falls within the specified range. **Note:** To use this relational operator, you must select the Range check pane in the Date Selection panel.

Operator	Displays Records Where...
- **Not within range**	The value in the indicated date field does *not* fall within the specified range. **Note:** To use this relational operator, you must select the Range check pane in the Date Selection panel.

Procedure: How to Apply Selection Criteria From the Selections Pane

When the Selections pane is turned on, there is one control (drop-down list) for every dimension in the OLAP hierarchy. Note that the name of the dimension field appears as defined in the Master File, even if an alternate column title has been specified)

To limit data for the dimensions that are included in the report:

1. Click the arrow to the right of the dimension to open the list of values.
2. Select one or more values from the list (*All* is the default value).

   To select multiple values, click the desired values while holding the Ctrl key on the keyboard.
3. Select a relational operator from the button to the left of the dimension to indicate the basis for selection (equals (=) is the default).

   You can toggle through a list of operators. See *Selection Criteria Relational Operators* on page 176.
4. Repeat steps 1-3 for each dimension whose values you wish to limit.
5. Click the *Run* button on the band below the Selections pane.

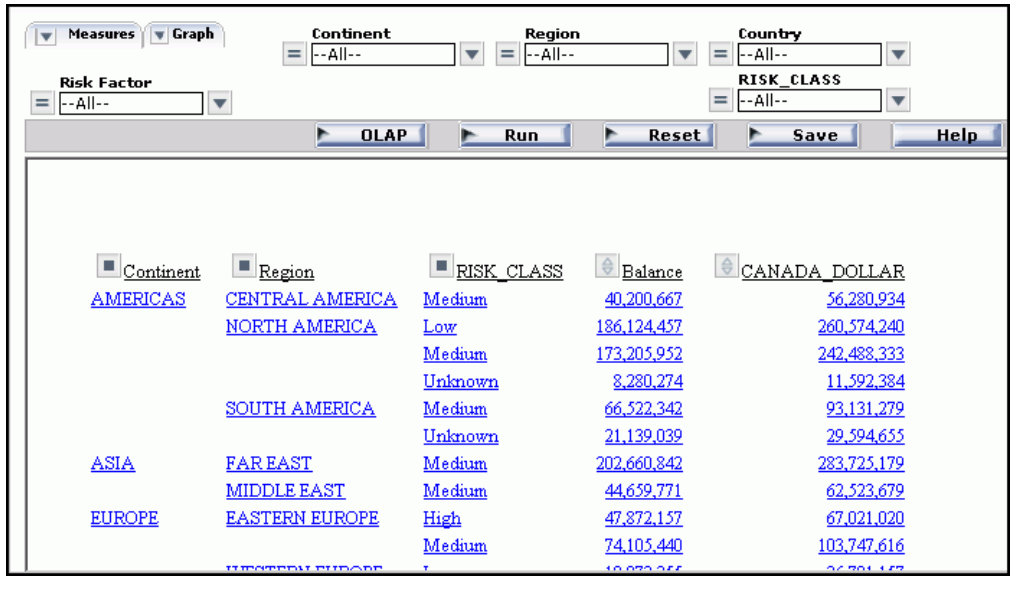
Tip: To change or eliminate selection criteria, reopen the values list and choose another value or choose *All*.

Example: Limiting Continents and Regions From the Selections Pane

The following is an example of limiting continents and regions from the selections pane.

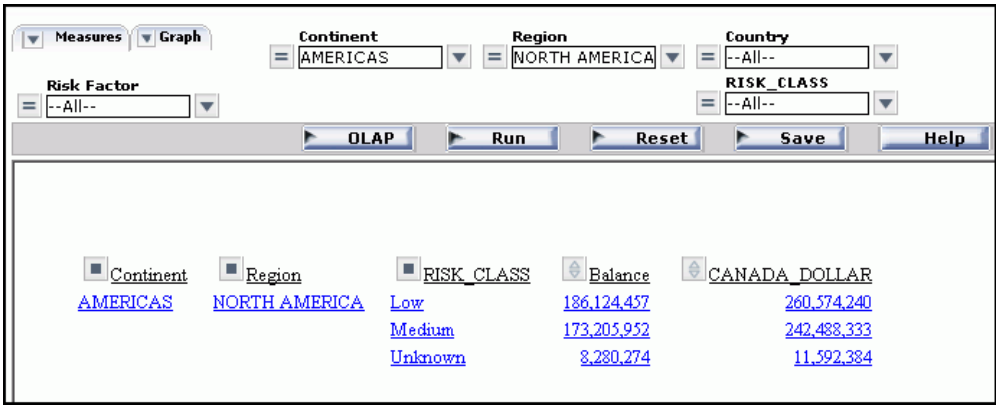
1. Run the Standard Report *OLAPREP7*.

As shown in the following image, the Selections pane above the report, the controls for Continent and Region are set to *All* to show all values of each dimension. You wish to focus on the data for one continent and one region.



2. In the Selections pane, click the arrow to the right of CONTINENT and select *AMERICAS* from the list of values. Use the default operator = to limit the data.
3. Next, click the arrow to the right of REGION and select *NORTH AMERICA*. Once again, accept the default operator =.
4. Click the *Run* button on the band below the Selections pane.

The output is now limited to data for the selected continent and region, as shown in the following image.



Procedure: How to Apply Selection Criteria From the Control Panel

1. Open the Control Panel.
2. Click the *Selection Criteria* button at the bottom right of the window.

   The Selection Criteria pane opens.
3. In the Dimensions pane above the Selection Criteria pane, expand a dimension and click *Values*.

   A secondary window opens. Select one or more values (press the Ctrl key to multi-select).
4. Click *OK* to return to the Selection Criteria pane, where the selected values appear in the drop-down lists.

   - If a Developer has applied selection criteria to the Reporting Object from which you create an OLAP report, you only see the selected acceptable values of the field.
   - If no selection criteria have been applied, you see all the values of the field in the drop-down lists.
5. In the *Selection Criteria* pane, click a relational operator next to the dimension to specify the relationship that you want to base selection on. For example, =, >, or <. For a complete list, see *Selection Criteria Relational Operators* on page 176.
6. Repeat the process for other dimensions whose values you wish to limit.
7. Click *Run* to execute your report.

Example: Limiting Continents and Countries From the Control Panel

The following is an example of limiting continents and countries from the Control Panel.

Tip: If you have access to the Selections pane, it provides the quickest way to limit data. For an illustration, see *Limiting Continents and Regions From the Selections Pane* on page 178.

1. Run the Standard Report *OLAPREP8*.

   The report shows data for continents and countries. You want to restrict the information to the Countries ARGENTINA and BRAZIL in the Continent AMERICAS.

2. Click the square icon next to *Continent* to open the Control Panel, as shown in the following image.

Continent	Country	RISK_CLASS	Balance	CANADA_DOLLAR
AMERICAS	ARGENTINA	Medium	36,921,658	51,690,321
		Unknown	5,246,222	7,344,711
	BRAZIL	Medium	29,600,684	41,440,958
		Unknown	15,892,817	22,249,944
	CANADA	Low	26,263,063	36,768,288
		Medium	29,949,571	41,929,399
	GUATEMALA	Medium	727,810	1,018,934
	HONDURAS	Medium	39,472,857	55,262,000
	MEXICO	Medium	74,781,444	104,694,022
		Unknown	8,280,274	11,592,384
	UNITED STATES	Low	159,861,394	223,805,952
		Medium	68,474,937	95,864,912
ASIA	HONG KONG	Medium	88,068,897	123,296,456
	ISRAEL	Medium	25,368,704	35,516,186
	JAPAN	Medium	114,591,945	160,428,723
	SAUDI ARABIA	Medium	19,291,067	27,007,494
EUROPE	CZECH. REP	High	42,854,041	59,995,657
		Medium	8,267,160	11,574,024
	ENGLAND	Low	10,214,318	14,300,045
		Medium	115,542,880	161,760,032

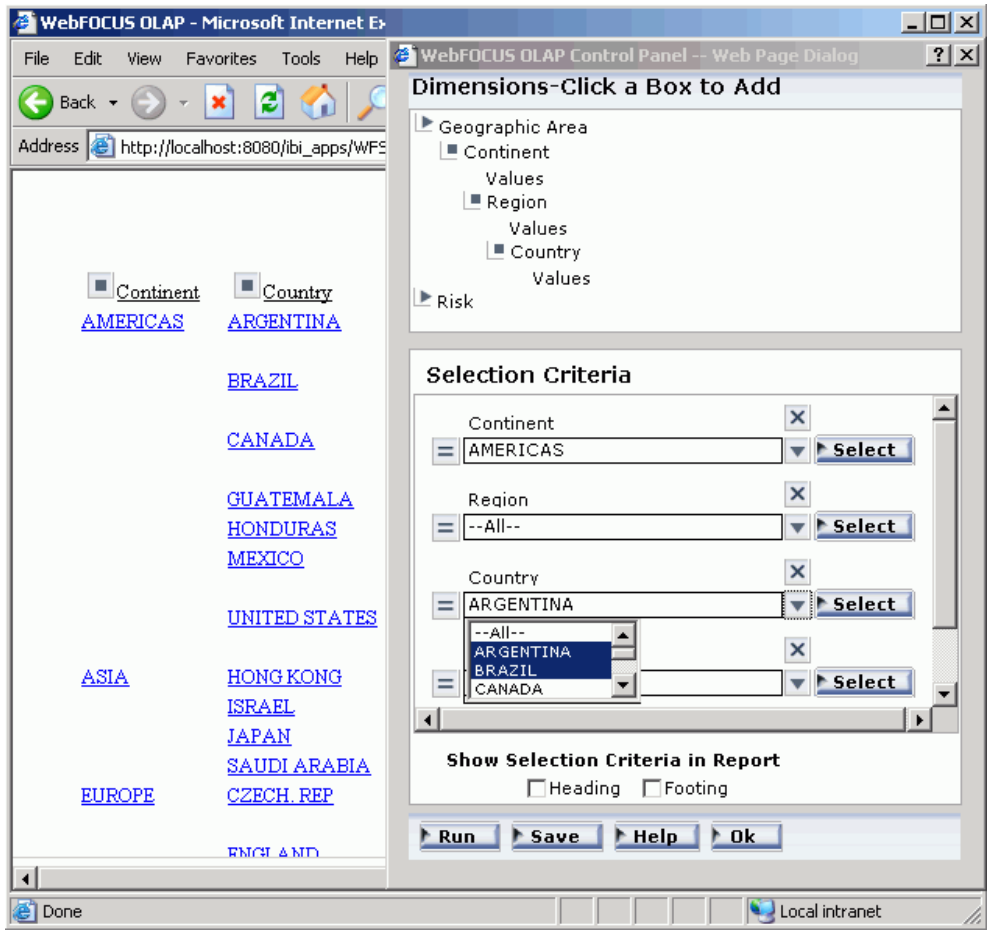
3. Click the *Selection Criteria* button at the bottom right to open the Selection Criteria pane.
4. In the Dimensions pane above the Selection Criteria pane, expand the *Geographic Area* dimension and click *Values* under Country.

   A secondary window lists the acceptable values.

5. In this window, choose *ARGENTINA* and *BRAZIL*, as shown in the following image, (hold down the Ctrl key to multi-select values).

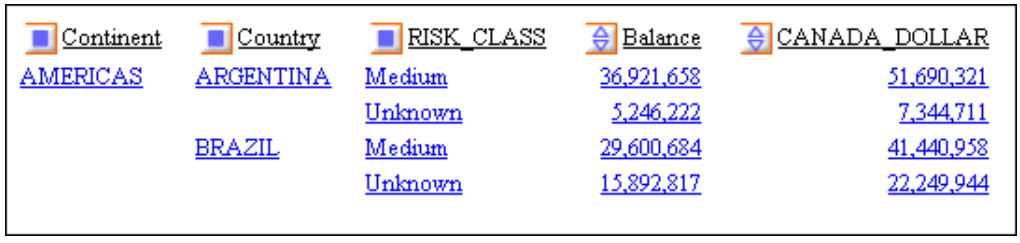
6. Click *OK* to return to the Selection Criteria pane.
7. Repeat step 3, but click *Values* under Continent and choose *AMERICAS*, then click *OK*.

The selected values now appear in the drop-down lists in the Selection Criteria pane, as shown in the following image.



8. Verify that you want to use the default operator =, then click the *Run* button at the bottom of the Control Panel.

The new report displays the data by Continent, AMERICAS followed by Country, as shown in the following image.



Continent	Country	RISK_CLASS	Balance	CANADA_DOLLAR
AMERICAS	ARGENTINA	Medium	36,921,658	51,690,321
		Unknown	5,246,222	7,344,711
	BRAZIL	Medium	29,600,684	41,440,958
		Unknown	15,892,817	22,249,944

Procedure: How to Change Selection Criteria From the Control Panel

Tip: If you have access to the Selections pane, it provides the easiest way to adjust or remove selection criteria. See *How to Apply Selection Criteria From the Selections Pane* on page 178.

From the Selections Criteria pane in the Control Panel:

1. Click the *Select* button next to the dimension value you wish to modify.

   A secondary window opens.

   To change a value, type the new value in the text pane or select one or more values from the list. (The value you type must be in the same case as the value in the data source.)

   You can input only one value in the text pane. If you select more than one value from the list, only the first value appears. However, all values appear in your report.

   To deselect a value, hold down the Ctrl key while clicking the value.

2. Click *OK* to return to the Selection Criteria pane where you can verify the revised value and/or change the relational operator if required.
3. Click *OK* again to confirm your choice and return to the main Control Panel window.
4. Click *Run* to execute your report.

Procedure: How to Remove Selection Criteria From the Control Panel

Tip: If you have access to the Selections pane, it provides the easiest way to adjust or remove selection criteria. See *How to Apply Selection Criteria From the Selections Pane* on page 178.

From the Selections Criteria pane in the Control Panel:

1. Select the criterion you want to remove.

2. Click the *Delete* button.

   The selection category is removed from the list.

3. Click *Run* to execute your report with all values.

Applying Selection Criteria to Date Elements

How to:

Apply Selection Criteria to a Date Field

Apply Selection Criteria to a Date Range

Add Dates to the Selections List pane

Delete Dates From the Selections List pane

Reference:

Date Format Limitations

You can apply selection criteria to date elements just as you apply them to other types of elements. The results are limited by the date(s) you select. For example, you can select to view data associated with a particular date or to exclude data from the specified date.

Note: Like other dimension elements, date fields must have been defined in the Master File by a Managed Reporting developer. The Master File specifies the date formats available for selection criteria.

In the Control Panel, you can choose the selection criteria from a Date selection pane that contains the appropriate controls for the date format.

You can also select a range of dates in a designated year by specifying a *From* and *To* date. Two relational operators are available for selecting a range of dates:

- The **Within range** operator displays records when the value in the indicated date field falls within the specified range.

- The **Not within range** operator displays records when the value in the indicated date field does *not* fall within the specified range.

For more information on supported date formats, see *Date Format Limitations* on page 199. For more information on specifying date formats, see the *Describing Data With WebFOCUS Language* manual.

Procedure: How to Apply Selection Criteria to a Date Field

1. Open the Control Panel.
2. Click the *Selection Criteria* button.

   The Selection Criteria pane opens.
3. In the Dimensions pane above the Selection Criteria pane, expand the dimension that includes the date field, and click the *Values* button.

   A secondary window displays controls for the date format of the dimension. For example, if the date format is YYM, only the year and month controls appear. If the format is YYMD, year, month, and day controls appear.

   Note: The date selection pane appears only when a supported date format is provided. See *Date Format Limitations* on page 199.
4. Specify a date using the spin controls, drop-down lists, or by typing the value.

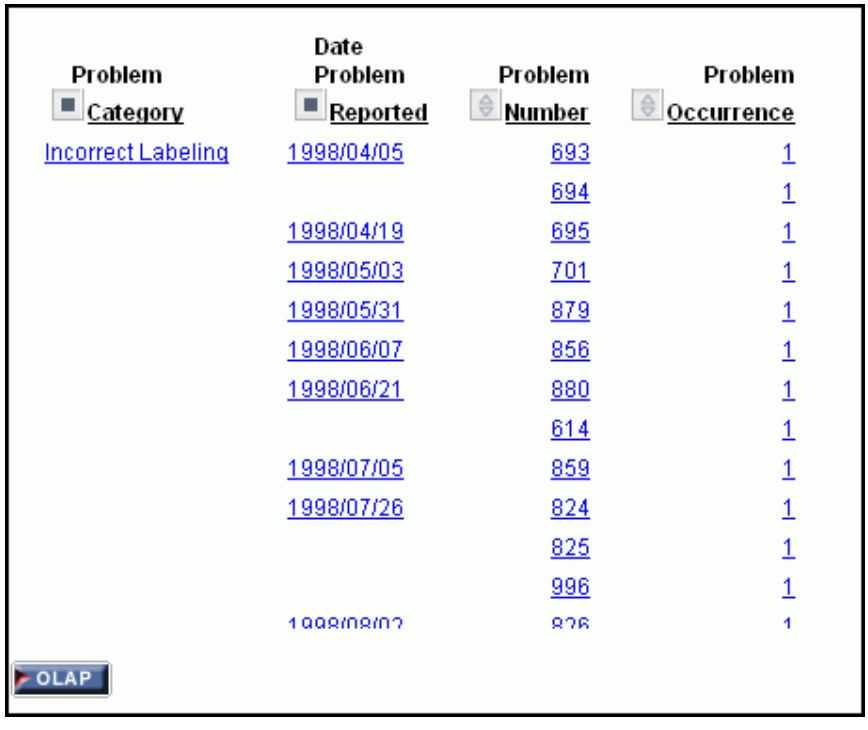
   If your date format includes edit masking such as Y.M.D, the date appears with forward slashes in the Date selection list pane, the Selection Criteria pane, and the drop-down list at the bottom of the report. However, the date edit mask appears as specified within the body of the report.
5. Click *Add* to display the date in the Selections list pane.
6. Click *OK* to return to the Selection Criteria pane and verify the selected date.
7. In the Selection Criteria pane, click a relations button to the left of the date field (for example, =, >, or <) to indicate a basis for record selection.
8. Optionally, define additional date selection criteria by repeating steps 2-7.
9. Click *Run* to execute your report.

Example: Applying Selection Criteria to a Date Field

The following is an example of applying selection criteria to a date file.

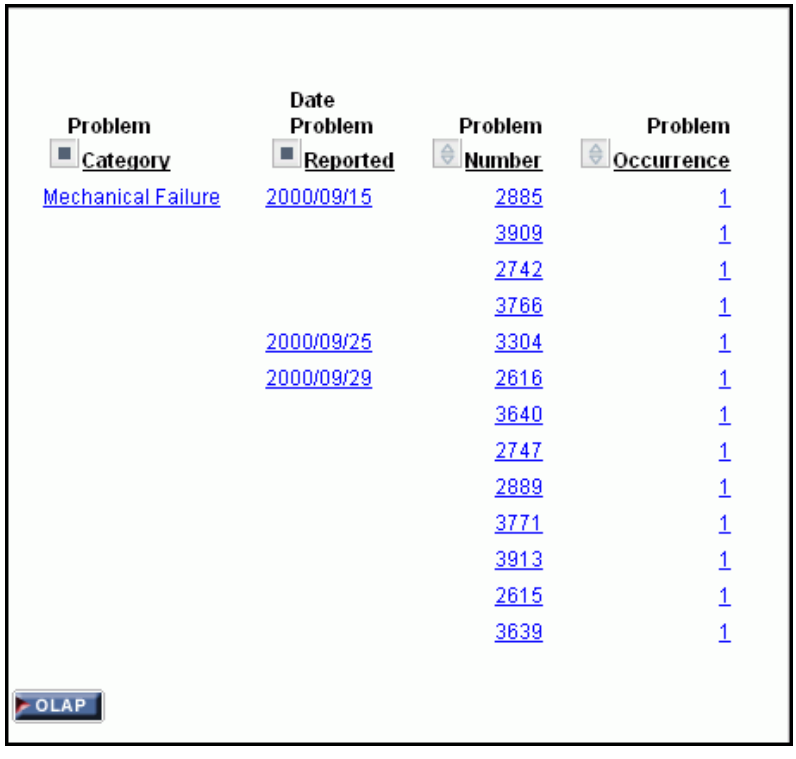
1. Run the Standard Report *OLAPREP9*.

As shown in the following images, the multi-page OLAP report shows several years of data about reported problems falling into five categories: incorrect labeling, missing components, physical damage, power failure, remote failure.



Problem Category	Date Problem Reported	Problem Number	Problem Occurrence
Incorrect Labeling	1998/04/05	693	1
		694	1
	1998/04/19	695	1
	1998/05/03	701	1
	1998/05/31	879	1
	1998/06/07	856	1
	1998/06/21	880	1
		614	1
	1998/07/05	859	1
	1998/07/26	824	1
		825	1
		996	1
	1998/08/02	826	1

You want to investigate problems reported on June 6, 2001. You can limit data based on a single date from the Control Panel.



Problem Category	Date Problem Reported	Problem Number	Problem Occurrence
Mechanical Failure	2000/09/15	2885	1
		3909	1
		2742	1
		3766	1
	2000/09/25	3304	1
	2000/09/29	2616	1
		3640	1
		2747	1
		2889	1
		3771	1
		3913	1
		2615	1
		3639	1

Note: To show the selection of a particular date, a dimension component has been added to the procedure. This dimension places Date Problem Reported in the Time Period dimension hierarchy directly below the root.

2. Click the *OLAP* button below the report to open the Control Panel.

   The OLAP button appears at the bottom of this report because the OLAP CONTROL setting was selected. For details, see *Setting OLAP Reporting Options* on page 122.

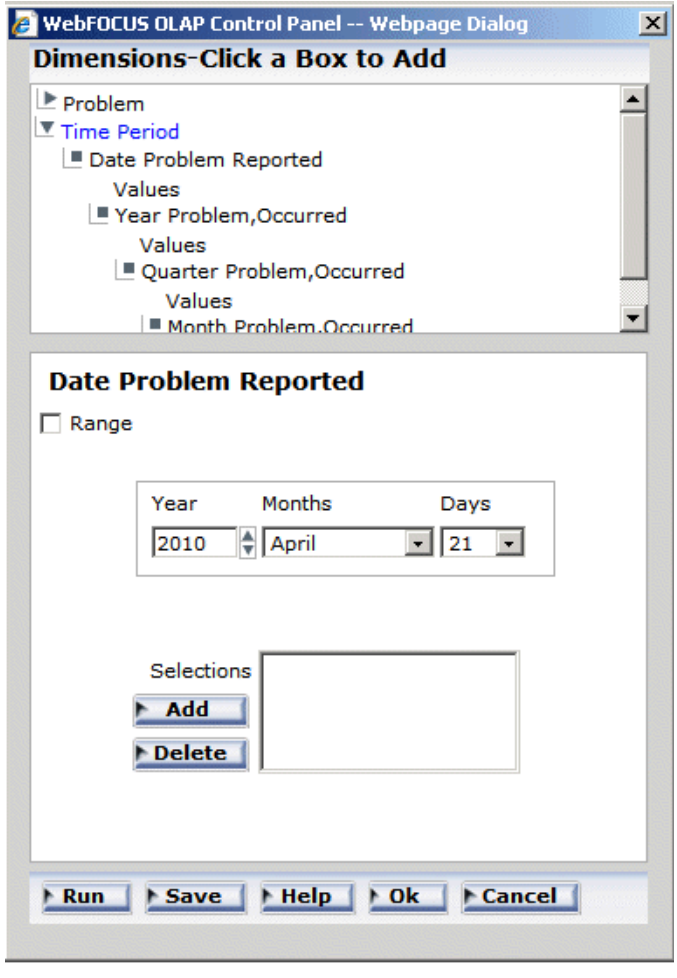
3. Click the *Selection Criteria* button at the bottom of the Control Panel.

   The Selection Criteria pane opens.

4. In the Dimensions pane above the Selection Criteria pane, expand the *TIMEPERIOD* hierarchy.

5. Click *Values* under Date Problem Reported.

The pane replaces the Selections Criteria pane, with a drop-down list for each selectable value (Year, Month, and Date) based on the date format of the selected field, as shown in the following image.



6. Select values. For example:

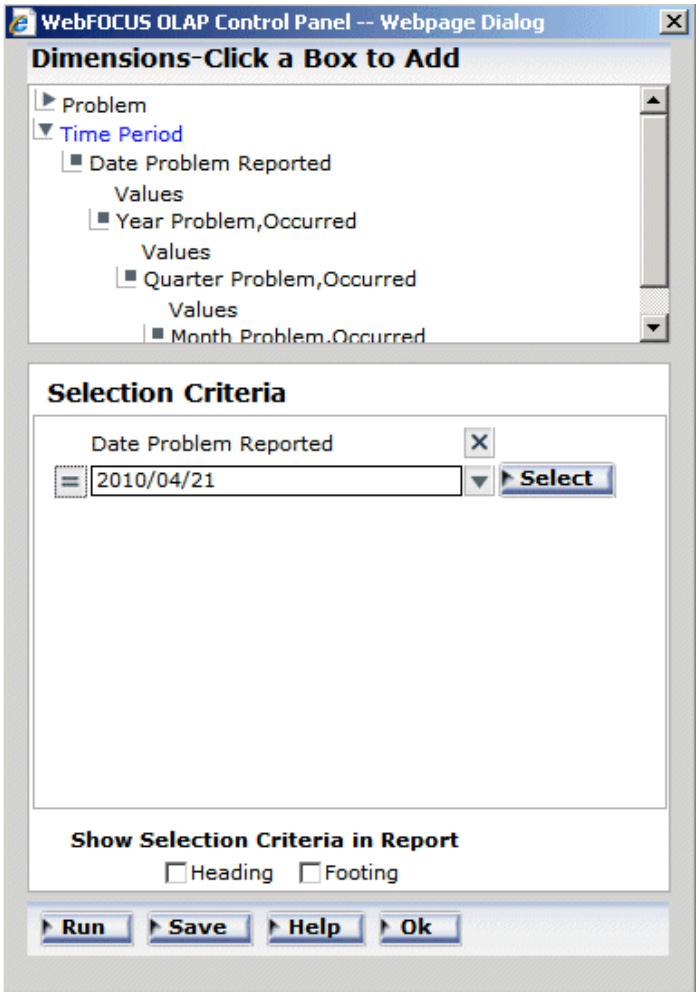
   a. Change the year to 2010 in the Year pane by using the spin buttons or typing the value.

   b. Select April from the Months drop-down list.

   c. Select 21 from the Days drop-down list.

   d. Click *Add* to enter these criteria in the input pane.

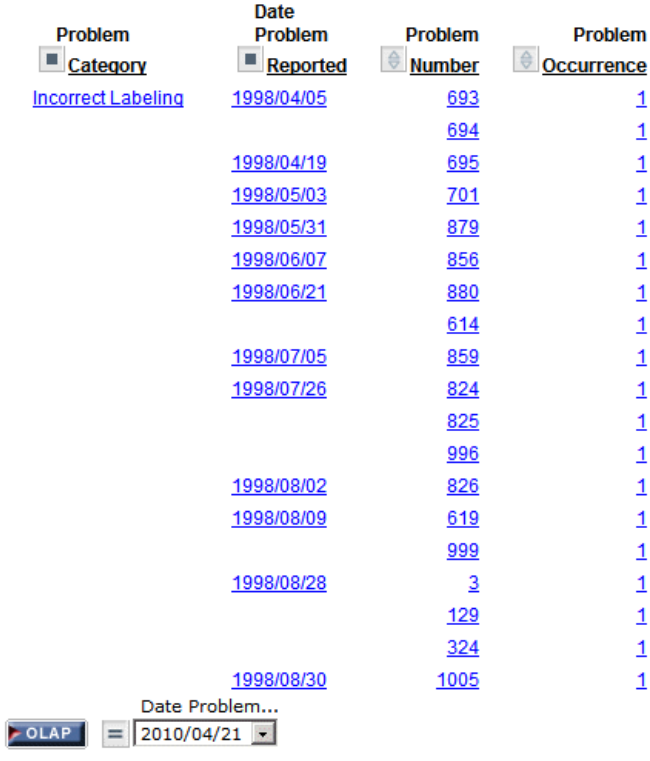
7. Click *OK* to return to the Selection Criteria pane, which now reflects your entries, as shown in the following image.



The relational operator to the left of the Date pane indicates that your report will contain data only for those rows where date is equal to (=) the values you entered. This default operator is correct for this example.

8. Click *Run* to see the problem report for the specified date.

Your selection criteria are listed beside the *OLAP* button at the bottom of the report, as shown in the following image.



Problem Category	Date Problem Reported	Problem Number	Problem Occurrence
Incorrect Labeling	1998/04/05	693	1
		694	1
	1998/04/19	695	1
	1998/05/03	701	1
	1998/05/31	879	1
	1998/06/07	856	1
	1998/06/21	880	1
		614	1
	1998/07/05	859	1
	1998/07/26	824	1
		825	1
		996	1
	1998/08/02	826	1
	1998/08/09	619	1
		999	1
	1998/08/28	3	1
		129	1
		324	1
	1998/08/30	1005	1

Procedure: How to Apply Selection Criteria to a Date Range

1. Open the OLAP Control Panel.

2. Click the *Selection Criteria* button.

The Selection Criteria pane opens.

3. In the Dimensions pane above the Selection Criteria pane, expand the dimension that includes the date field, and click the *Values* button.

A secondary window displays controls for the date format of a dimension. For example, if the date format is YYM, only the year and month controls appear. If the format is YYMD, year, month, and day controls appear.

Note: The Date selection pane appears only when a supported date format is provided. See *Date Format Limitations* on page 199.

4. Click the *Range* check pane.

   Inclusive and Exclusive options buttons appear:

   - Choose *Inclusive* to show the range including the dates specified.
   - Choose *Exclusive* to show the range excluding the dates specified.

   Note:

   - You can select only one range of dates at a time.
   - You can apply selection criteria to a range of dates only if the date format contains a year. See *Date Format Limitations* on page 199.

   From and To drop-down lists open for all selectable options. By default, the current date appears.

5. Specify a *From* date and a *To* date by using the spin controls and drop-down lists.
6. Click *OK* to return to the Selection Criteria pane.
7. To view both the From and To dates of the range selected, click the down arrow on the drop-down list.
8. Click a relational operator to the left of the date element in the Selection Criteria pane:

   - Choose *Within range* operator to display records when the value falls within the specified range.
   - Choose *Not within range* operator to display records when the value does *not* fall within the specified range.

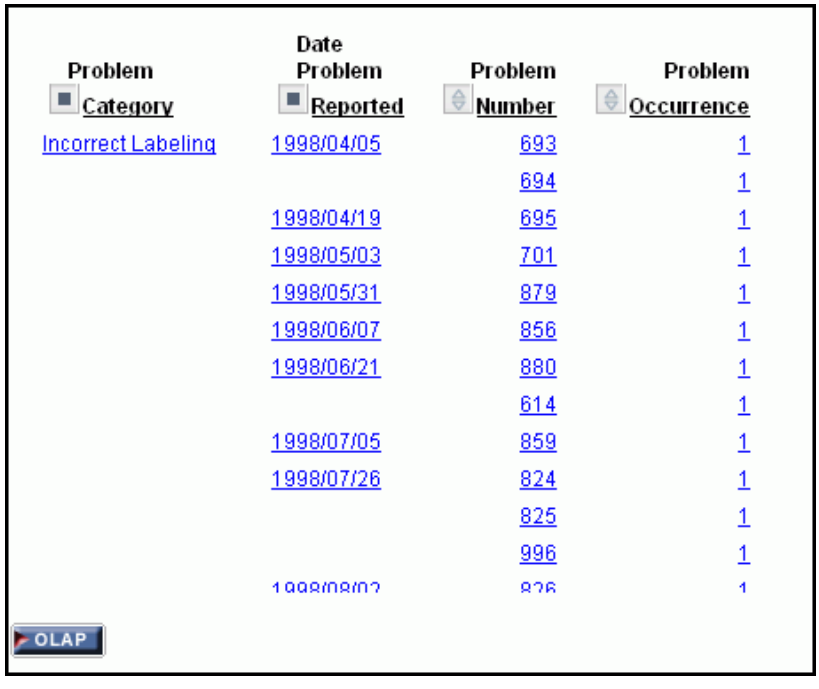
9. Click *Run* to execute your report.

Example: Applying Selection Criteria to a Range of Date Fields

The following is an example of applying selection criteria to a range of date fields.

1. Run the Standard Report *OLAPREP9*.

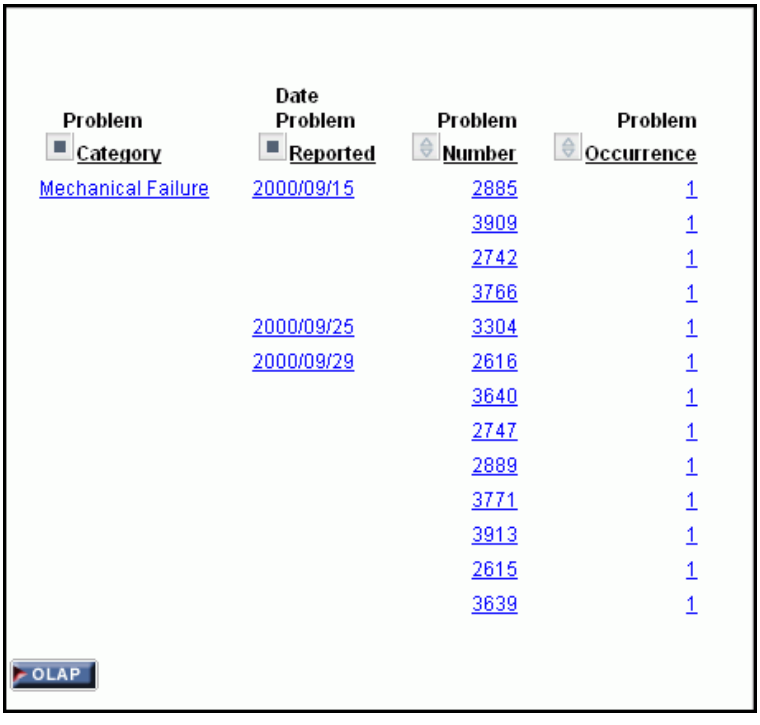
As shown in the following images, your report shows problem information reported over the course of several years.



Problem Category	Date Problem Reported	Problem Number	Problem Occurrence
Incorrect Labeling	1998/04/05	693	1
		694	1
	1998/04/19	695	1
	1998/05/03	701	1
	1998/05/31	879	1
	1998/06/07	856	1
	1998/06/21	880	1
		614	1
	1998/07/05	859	1
	1998/07/26	824	1
		825	1
		996	1
	1998/08/02	826	1

OLAP

The information falls into the following categories: incorrect labeling, missing components, physical damage, power failure, and remote failure.



Problem Category	Date Problem Reported	Problem Number	Problem Occurrence
Mechanical Failure	2000/09/15	2885	1
		3909	1
		2742	1
		3766	1
	2000/09/25	3304	1
	2000/09/29	2616	1
		3640	1
		2747	1
		2889	1
		3771	1
		3913	1
		2615	1
		3639	1

You want to restrict the information to problems reported between June 6, 2001 and July 6, 2001. From the Control Panel, you can limit data based on a range of dates.

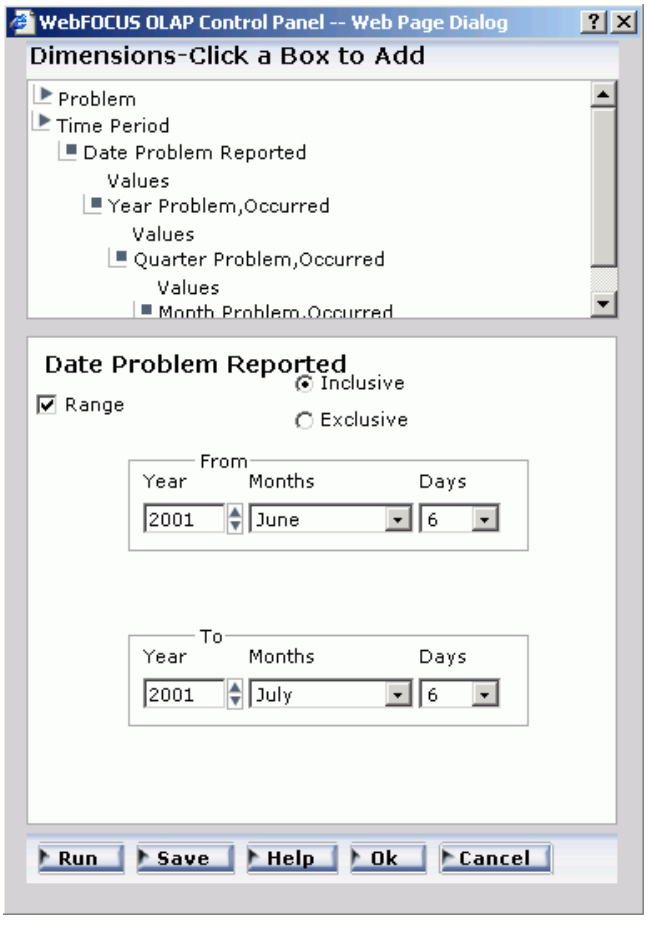
2. Click the *OLAP* button below the report to open the Control Panel.
3. Click the *Selection Criteria* button at the bottom right of the Control Panel.

   The Selection Criteria pane opens.
4. In the Dimensions pane above the Selection Criteria pane, expand the *TIMEPERIOD* hierarchy.
5. Click *Values* under Date Problem Reported.

   The PROBLEM_DATE pane opens over the Selections Criteria pane, with a drop-down list for each selectable value (Year, Month, and Date) based on the date format of the selected field.

6. Select the *Range* check pane:
   - Inclusive and Exclusive options buttons appear. To show the range including the dates specified, choose Inclusive (the default).
   - From and To drop-down lists open for all selectable options. By default, the current date appears.
7. Specify values for the From date. For example:
   a. Change the current year to 2001 by using the spin buttons.
   b. Select *June* from the Months drop-down list to change the current calendar month.
   c. Select *6* from the Days drop-down list to change the current calendar day.
8. Specify values for the To date. For example:
   a. Change the current year to 2001 by using the spin buttons.
   b. Select *July* from the Months drop-down list to change the current calendar month.
   c. Select *6* from the Days drop-down list to change the current calendar day.

The following image shows the selections.

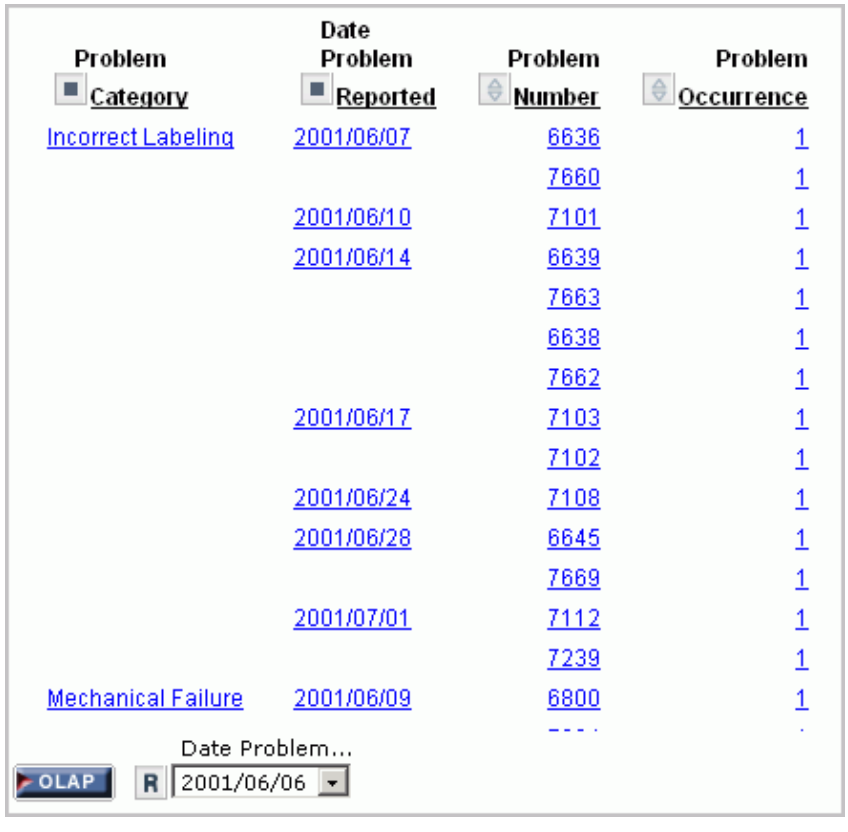


9. Click *OK* to return to the Selection Criteria pane.

   a. To view the range of dates, click the down arrow in the drop-down list, then click *OK* again.

   b. To report on information within the specified range of dates, accept the default, *Within range* R operator.

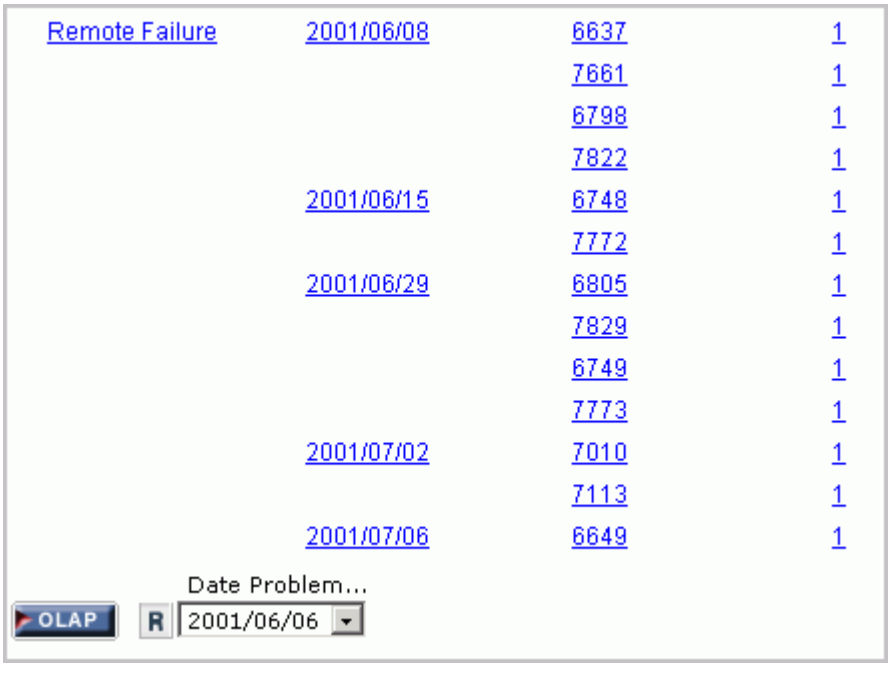
10. Click *Run* to execute the report, which now only displays problem information from June 6, 2001 to July 6, 2001, as shown in the following image.



Problem Category	Date Problem Reported	Problem Number	Problem Occurrence
Incorrect Labeling	2001/06/07	6636	1
		7660	1
	2001/06/10	7101	1
	2001/06/14	6639	1
		7663	1
		6638	1
		7662	1
	2001/06/17	7103	1
		7102	1
	2001/06/24	7108	1
	2001/06/28	6645	1
		7669	1
	2001/07/01	7112	1
		7239	1
Mechanical Failure	2001/06/09	6800	1

The date element appears at the bottom of the window.

11. To view the range of dates, click the arrow in the drop-down list.



Procedure: How to Add Dates to the Selections List pane

1. Open the Control Panel.
2. Click *Selection Criteria* to open the Selection Criteria pane.
3. Click the *Select* button to open the Date selection pane.
4. Specify the date you want to add by using the spin buttons, drop-down lists, or by typing the value.
5. Click *Add*.

   The date appears inside the Selections list pane.
6. Click *OK* to return to the Selection Criteria pane.

Procedure: How to Delete Dates From the Selections List pane

1. Open the Control Panel.
2. Click *Selection Criteria* to open the Selection Criteria pane.
3. Click *Select* to open the Date selection pane.

4. Select one or more dates that you want to remove from the Selections list pane.
5. Click *Delete* to remove the date.
6. Click *OK* to return to the Selection Criteria pane.

Reference: Date Format Limitations

Note the following limitations when applying selection criteria to date elements:

- The Date selection pane does not support Julian dates. However, if you are using Julian dates, the Date controls still open.
- Dates containing only a day format (D, I2D, A2D) are not supported from the Date selection pane. Instead, the data source provides a list of values.
- The Range check panel is enabled on the Date selection pane when the date format contains one of the following formats:
  - Any smart date format. For example, YMD, MDY, YYMD, MDYY, Q, M.
  - A4YY
  - I4YY
  - I8YYMD
  - A8YYMD
  - I6YYM
  - A6YYM

Visualizing Trends

How to:

Add a Column of Bar Graphs for a Numeric Measure

To make your reports more powerful, you can insert visual representations of selected data directly into the report output. These visual representations, which appear as a column of vertical or horizontal bar graphs adjacent to the numeric data, make relationships and trends among data more obvious.

You can apply data visualization graphs to selected measures from:

- Context menus in the report itself.

  This is the quickest way to apply data visualization bar graphs to numeric measures.

- The Measures control in the Selections pane.
- Check panes in the Measures pane on the Control Panel.

For details about data visualization graphs, see *Visualizing Trends in Reports* on page 235.

Procedure: How to Add a Column of Bar Graphs for a Numeric Measure

The quickest way to apply data visualization graphics is from the report itself:

1. Right-click the title of a measure column.
2. Choose *Visualization* from the menu.

The report runs automatically, displaying a column of bar graphs following the selected measures column.

Tip: To remove the bar graphs, right-click the measure column title and choose *Remove Visualization* from the menu.

For other methods of applying bar graphs to columns, see *Visualizing Trends in Reports* on page 235.

Displaying Graphs and Reports

How to:

Graph a Measure From the Selections Pane

Create a Pie Chart From the Selections Pane

Graph a Measure From the Control Panel

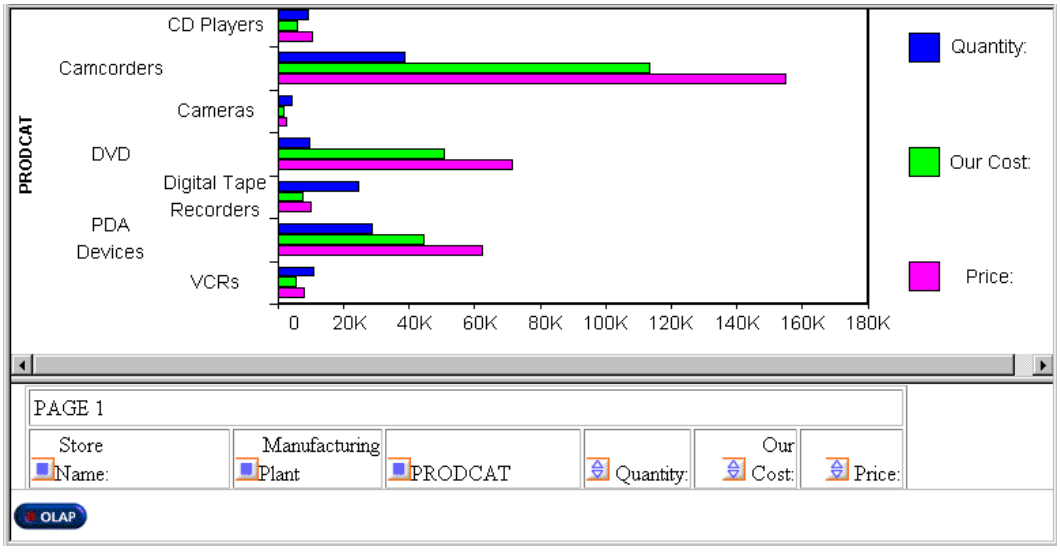
Reference:

Combining Graph Styles and Measure Styles in OLAP Graphs

When you graph a measure in an OLAP report, you select the specific data elements to include and view the tabular report and a graphical representation of the identical information simultaneously in a split window. The graph appears in a frame in the top half of the window to facilitate comparison.

To create a graph, the data in the report must include at least one numeric measure and one sort field (By or Across). The Graph control is activated in the Selections pane or the Control Panel when these basic requirements are met.

As shown in the following image, it includes three sort fields (PRODCAT, Store Name, and Manufacturing Plant) and three numeric measures (Quantity, Our Cost, and Price), displayed as horizontal bar charts for quick comparison.



You can request a graph from an OLAP report, from the Selections pane, or from the Control Panel:

- **From an OLAP report,** you can create a vertical bar chart to represent the data in a selected measure.
- **From the Selections pane or the Control Panel,** you can create seven different types of graphs and apply them to one or more measures:
  - Vertical Bar (This is the default graph type.)
  - Vertical Line
  - Vertical Area
  - Horizontal Bar
  - Horizontal Line
  - Horizontal Area
  - Pie

If you choose to graph more than one measure, you can employ different graph types to suit the data in each column, with the following restrictions:

- When you select Vertical or Horizontal Bar, Line, or Area as the controlling graph style for a measure, you can apply any combination of these styles to other measures. For example, the first measure can appear as bars, the second measure as lines, and the third measure as areas. All measures must have the same orientation (vertical or horizontal).
- When you choose Pie as the controlling graph style, you can use only pie charts for other measures.

For details about supported combinations, see *Combining Graph Styles and Measure Styles in OLAP Graphs* on page 202.

Note: If drill-down capability has been enabled for the dimensions in a report, the same functionality is automatically enabled for graphs. You can drill down from one graphical representation of your data to another.

Reference: Combining Graph Styles and Measure Styles in OLAP Graphs

The following table lists the available style combinations in the second column for each graph style in the first column.

Controlling Graph Style	Potential Measure Styles
Vertical Bar (default)	Vertical Bar (default)
	Vertical Line
	Vertical Area
Vertical Line	Vertical Line (default)
	Vertical Bar
	Vertical Area
Vertical Area	Vertical Area (default)
	Vertical Bar
	Vertical Line

Controlling Graph Style	Potential Measure Styles
Horizontal Bar	Horizontal Bar (default)
	Horizontal Line
	Horizontal Area
Horizontal Line	Horizontal Line (default)
	Horizontal Bar
	Horizontal Area
Horizontal Area	Horizontal Area (default)
	Horizontal Line
	Horizontal Area
Pie	Pie

Procedure: How to Graph a Measure From the Selections Pane

1. Click the down arrow to the left of the Graph control to open a pane that contains all the numeric measures in the current report.

   There is a check pane to the left of each measure and a graph button to the right of each measure. All check panes are unchecked by default and all graph buttons are grayed (inactive) by default.

2. Select a check pane associated with a measure.

   The graph button to the right of the measure becomes active. The default graph style is Vertical bar.

3. Toggle through the seven graph style icons until you reach the one you want to apply to the selected measure.

4. Repeat steps 2 and 3 for any other measures you want to graph.

   For a list of graph types that can be defined, see *Combining Graph Styles and Measure Styles in OLAP Graphs* on page 202.

5. Click the *Run* button on the band below the Selections pane.

   The graph opens in a separate frame above the report and Selections pane.

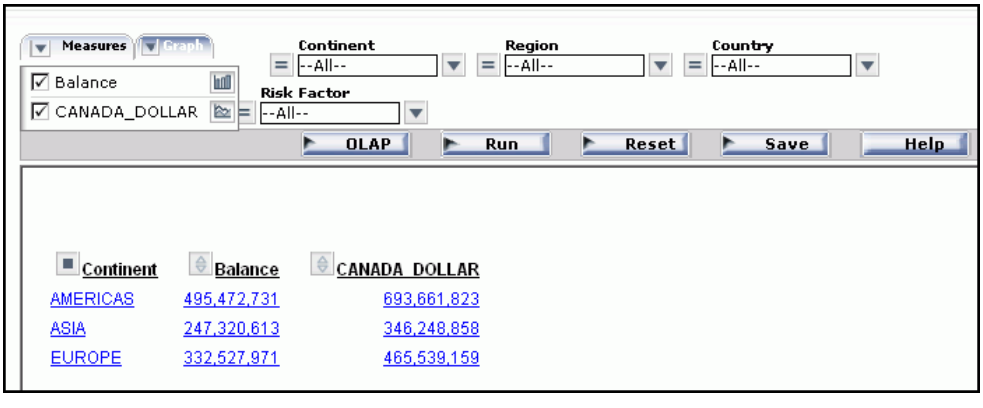
Example: Graphing Multiple Measures From the Selections Pane

This example contains two measures, BALANCE and CANADA_DOLLARS, sorted by Continent. You would like to see graphical representations of both measures. To contrast the graphical information, you use a different graph type for each one.

1. Run the Standard Report *OLAPREP4*.
2. Right-click the *Region* field and select *Delete* from the menu to limit the report to the fields you want to graph (one dimension, Continent, and two measures, BALANCE and CANADA DOLLARS).
3. In the Selections pane above the report, click the arrow to the left of the Graph control to list the measures.

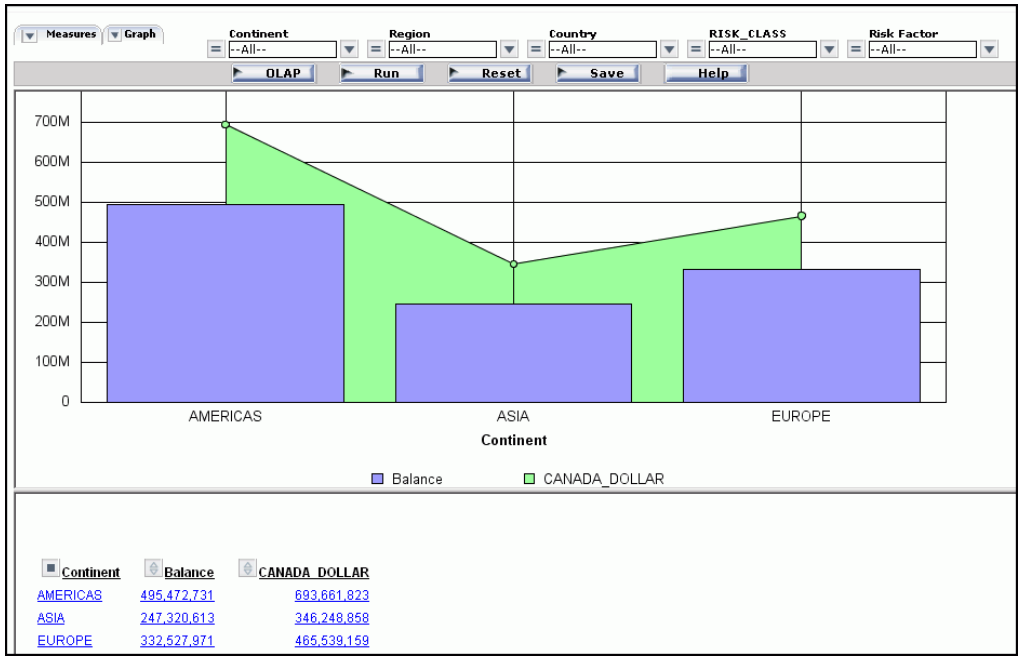
   - Click the *BALANCE* measure check pane, then choose the *vertical bar* icon to the right of the measure. (This is the default graph type.)
   - Click the *CANADA_DOLLAR* measure check pane, then toggle through the graph icons until you see the *vertical area* graph.

   As shown in the following image, the Selections pane has the Graph control listing BALANCE represented as a vertical bar and CANADA_DOLLAR represented as a vertical area.



4. Click the *Run* button on the band below the Selection pane to generate the graphs.

The following image shows the results of the graph selections.



Procedure: How to Create a Pie Chart From the Selections Pane

The following procedure is an example of creating a pie chart from the Selections pane.

1. Run the Standard Report *OLAPREP2*.

The report shows order information for stores that sell electronic products from Century Corporation. Audio Expert shows the highest numbers, with orders of digital products significantly exceeding analog.

You want a clearer picture of how the digital orders breakdown by product so you decide to create a pie chart.

2. Click *Digital* for Audio Expert in Q2 to hone in on the data you want to graph, as shown in the following image.

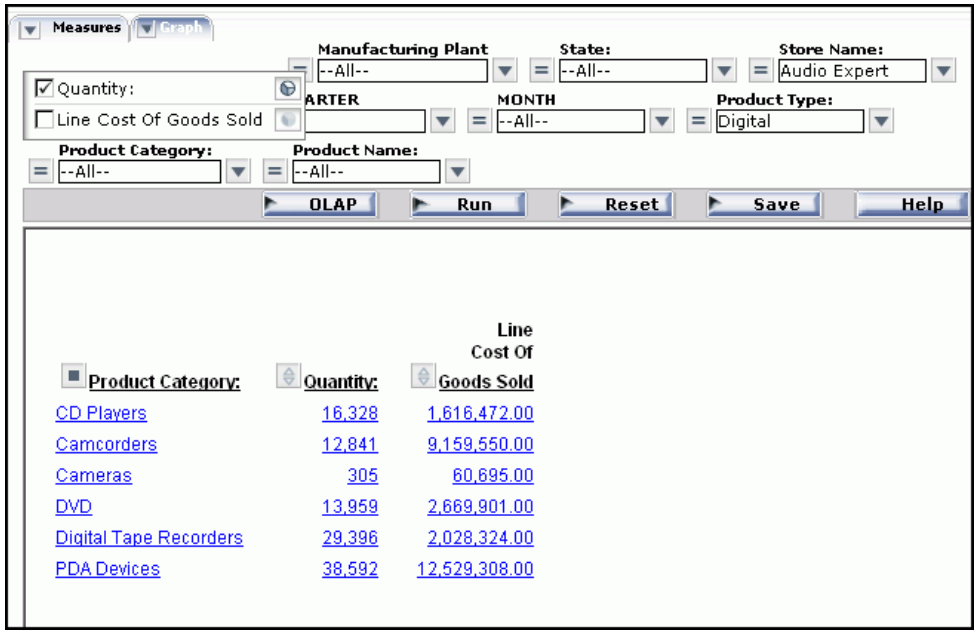
QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	Analog	18,449	3,969,296.00
		Digital	22,206	5,109,400.00
	Audio Expert	Analog	78,449	16,467,146.00
		Digital	105,983	25,092,678.00
	City Video	Analog	6,287	1,315,015.00
		Digital	7,196	1,607,513.00
	Consumer Merchandise	Analog	6,980	1,542,036.00
		Digital	14,957	3,251,090.00
	TV City	Analog	19,077	3,772,119.00
		Digital	41,307	10,128,967.00
	Web Sales	Analog	545	124,366.00
		Digital	829	190,201.00
	eMart	Analog	97,128	21,152,262.00
		Digital	108,221	24,990,368.00
Q2	AV VideoTown	Analog	11,781	2,663,655.00
		Digital	27,377	5,928,507.00
	Audio Expert	Analog	57,944	11,868,758.00
		Digital	111,421	28,064,250.00

The report now shows the Quantity and Line Cost of Goods sold for several digital products sold at Audio Expert in Q2, as shown in the following image.

PRODCAT	Quantity:	Line Cost Of Goods Sold
CD Players	16,328	1,616,472.00
Camcorders	12,841	9,159,550.00
Cameras	305	60,695.00
DVD	13,959	2,669,901.00
Digital Tape Recorders	29,396	2,028,324.00
PDA Devices	38,592	12,529,308.00

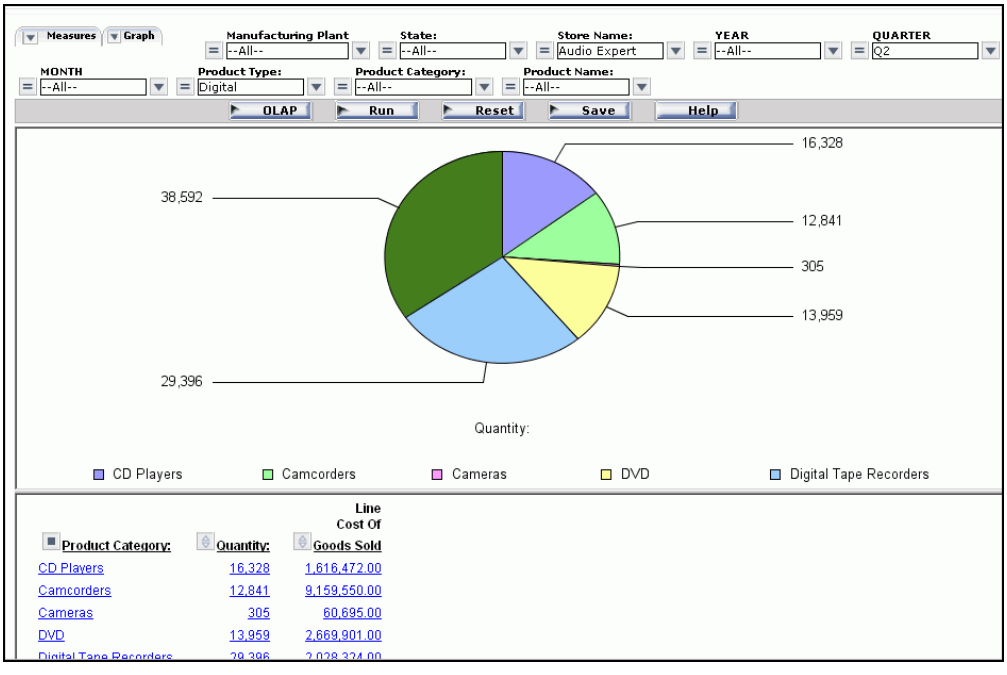
3. Right-click *Quantity* and choose *Show Panel* to open the Selection pane.

4. In the Selections pane, click the arrow to the left of the Graph control, then click the check pane for *Quantity* and toggle through the graph options until you reach the *pie* icon, as shown in the following image.



5. Click the *Run* button on the band below the Selections pane.

As shown in the following image, the graph appears in a pane above the report. You can see at a glance that PDA Devices constituted about 1/3 of digital sales at the Audio Expert store in Q2.



Procedure: How to Graph a Measure From the Control Panel

1. Run the Standard Report *OLAPREP4*.
2. Open the Control Panel.
3. Select the *Show Graph* check pane located below the Measures Properties pane.

   Note that the contents of the Drill Down and Drill Across panes determine the X-axis fields. When there are multiple drill (X-axis) fields, multiple graphs appear vertically stacked in the same frame. The measures appear as Y-axis fields on the graphs you display.

4. Click the *Graph* icon adjacent to the Show Graph check pane.

   The Measures and GraphStyle pane opens.

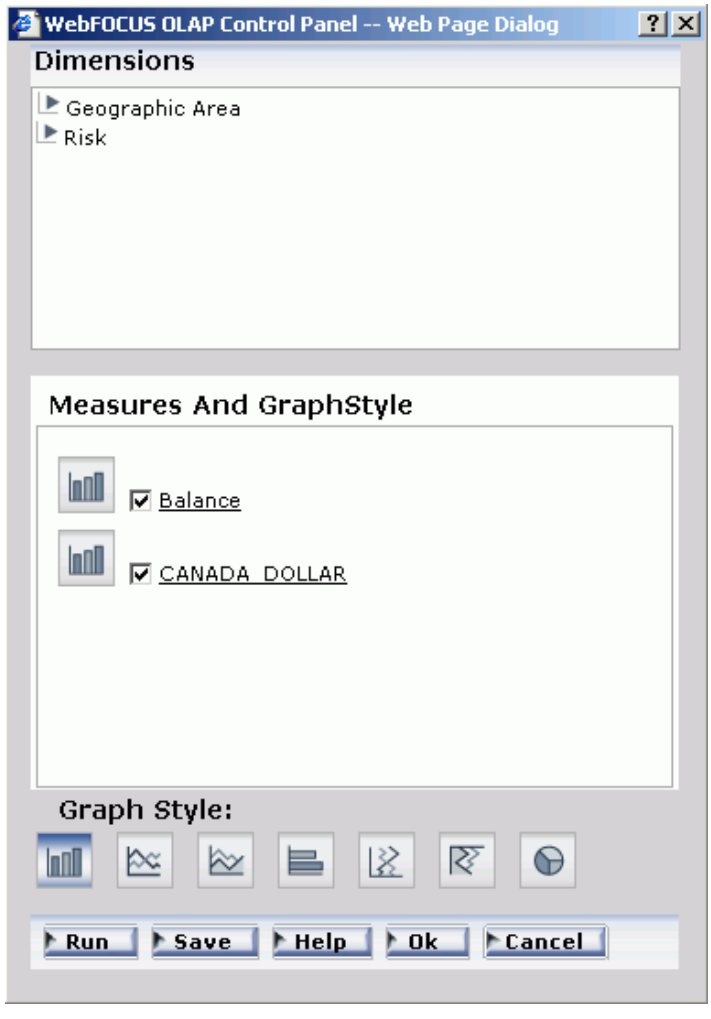
   Check panes associated with the available measures are unchecked by default.

5. Click one of the seven icons at the bottom of the window to set a controlling graph style.

6. Select the check pane(s) for the measure(s) you wish to graph.

   The graph icon corresponding to the controlling graph style appears next to each selected measure.

7. Click the icon next to a measure to choose a different graph style from the supported combinations, as shown in the following image.



8. Click *OK* to return to the main Control Panel window with all the graph settings retained.
9. Click *Run* to display the graph(s) and the tabular report in a split window.

Note:

- If you select the Show Graph check pane and click Run without selecting a controlling graph style, the default style (Vertical Bar) is applied.
- If you click *Run* without selecting the Show Graph check pane, a tabular report appears without a graph.
- If you select at least one measure in the Measures and GraphStyle pane without selecting the Show Graph check pane, when you click *OK* the system automatically selects the Show Graph check pane. The tabular report appears with a graph.
- You cannot choose to graph alphanumeric or date fields. If there are no numeric measures, the Show Graph check pane and the Graph button are disabled (grayed out).

Controlling the Display of Measures in a Report

In this section:

Stacking Measures

Changing the Order of Measure Columns

Hiding and Displaying Measures

While you cannot add new measures to an OLAP report without returning to the original report request, you can adjust the display of the measures in the report in several ways. You can:

- Stack measures in rows.
- Change the order of measure columns.
- Hide and expose measures.
- Add a column of data visualization bar graphs following any numeric measure.

Stacking Measures

How to:

Display Stacked Measures

When you have more than one measure in an OLAP report, you can stack the measures in separate rows within the same column to reduce the width of the report.

You cannot apply data visualization bar graphs to stacked measures.

Procedure: How to Display Stacked Measures

1. Open the Control Panel.
2. Select the *Stack Measures* check pane to display measures in separate rows under one column.
3. Click *Run* to execute your report.

Tip: To restore the standard display, deselect the *Stack Measures* check pane and rerun the report.

Example: Displaying Stacked Measures

The following is an example of displaying stacked measures.

1. Run the Standard Report *OLAPREP4*.

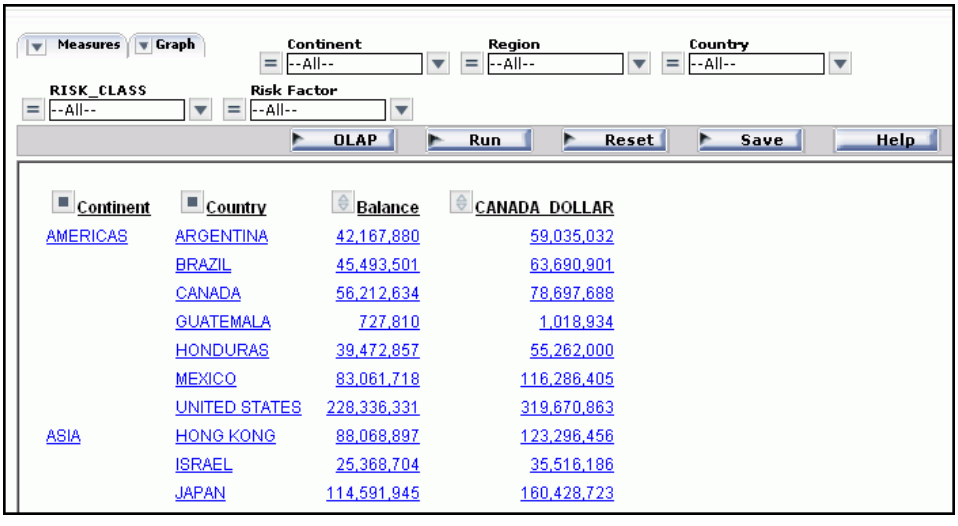
   Initially, this report is sorted vertically by Continent and Risk_Class and horizontally by Region, and the measures (Balance and CANADA_DOLLARS) appear as separate columns.

2. For this example, you will not need the Region dimension, but you will need the Country dimension. You can quickly make these changes to the report:

   a. Right-click *Region* and select *Delete* from the menu.

   b. Right-click *Continent* and select *Unhide* from the menu, then select *Country* from the secondary menu.

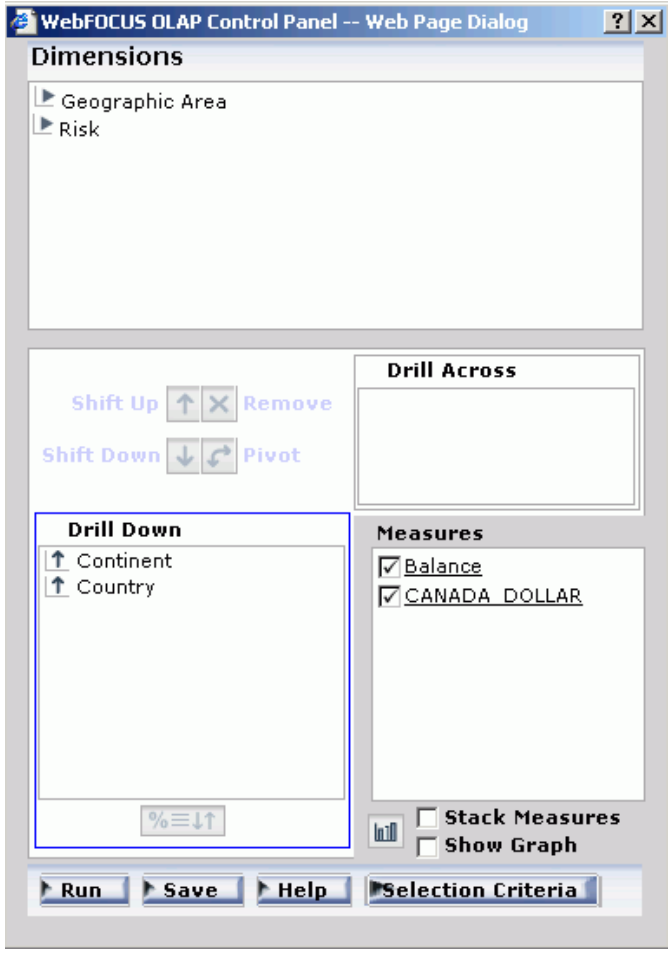
The report now displays data by Continent followed by Country, as shown in the following image.



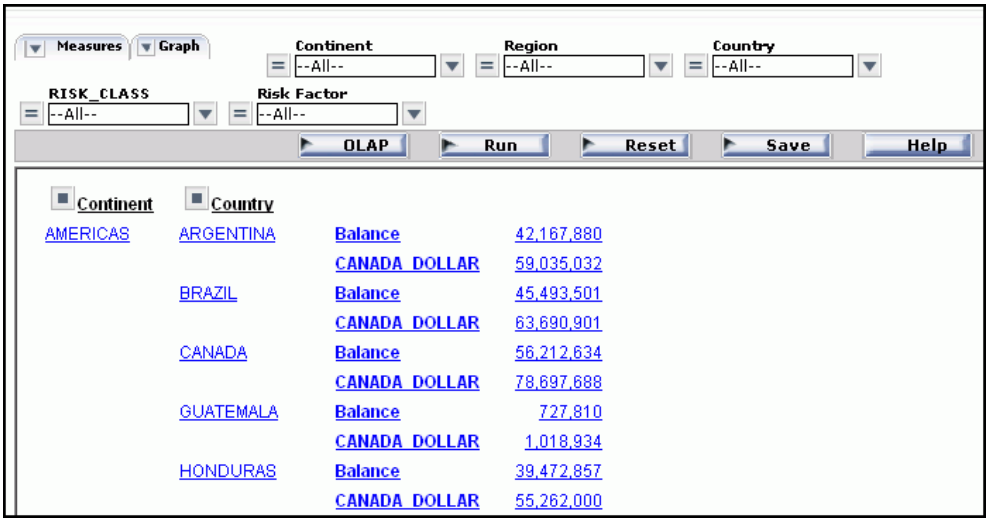
You wish to show the measure titles and data values in rows.

3. Click the *OLAP* button on the band below the Selections pane to open the Control Panel.

4. Click the *Stack Measures* check pane below the Measures pane, as shown in the following image.



5. Click *Run* to execute the report and display the titles and values of the measures stacked over each other in separate rows, as shown in the following image.



Changing the Order of Measure Columns

How to:

Reposition Measure Columns in an OLAP Report

You can change the order in which measure columns are presented in the report.

Procedure: How to Reposition Measure Columns in an OLAP Report

To reposition a numeric column, drag and drop the field into a new column position.

The cursor changes to a plus sign (+) to indicate acceptable places into which you can drop the field. (Unacceptable positions are indicated by a circle with a slash cross the center.)

Example: Repositioning Measure Columns

The following is an example of repositioning measure columns.

1. Run the Standard Report *OLAPREP2*.

As shown in this image, the column for the Quantity measure precedes the column for the Line Cost of Goods Sold measure.

QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	Analog	18,449	3,969,296.00
		Digital	22,206	5,109,400.00
	Audio Expert	Analog	78,449	16,467,146.00
		Digital	105,983	25,092,678.00
	City Video	Analog	6,287	1,315,015.00
		Digital	7,196	1,607,513.00
	Consumer Merchandise	Analog	6,980	1,542,036.00
		Digital	14,957	3,251,090.00
	TV City	Analog	19,077	3,772,119.00
		Digital	41,307	10,128,967.00
	Web Sales	Analog	545	124,366.00
		Digital	829	190,201.00
	eMart	Analog	97,128	21,152,262.00
		Digital	108,221	24,990,368.00

2. To change the order of columns, drag and drop Line Costs of Goods Sold before Quantity.

The cursor changes to a plus sign (+) to designate where you can drop the field. The report, as shown in the following image, now displays the Quantity column as its last column.

QUARTER	Store Name:	PRODTYPE	Line Cost Of Goods Sold	Quantity:
Q1	AV VideoTown	Analog	3,969,296.00	18,449
		Digital	5,109,400.00	22,206
	Audio Expert	Analog	16,467,146.00	78,449
		Digital	25,092,678.00	105,983
	City Video	Analog	1,315,015.00	6,287
		Digital	1,607,513.00	7,196
	Consumer Merchandise	Analog	1,542,036.00	6,980
		Digital	3,251,090.00	14,957
	TV City	Analog	3,772,119.00	19,077
		Digital	10,128,967.00	41,307
	Web Sales	Analog	124,366.00	545
		Digital	190,201.00	829
	eMart	Analog	21,152,262.00	97,128
		Digital	24,990,368.00	108,221

Hiding and Displaying Measures

How to:

Hide or Expose a Measure From the Report

Hide or Display a Measure From the Selections Pane

Display or Hide a Measure From the Control Panel

You can hide and expose measures from an OLAP report, the Selections pane, or the Control Panel.

Procedure: How to Hide or Expose a Measure From the Report

To hide a measure column, right-click the column title and choose *Hide* from the menu. The column is automatically removed from the display.

To expose a hidden measure column, right-click a displayed measure and choose *Unhide* from the menu. A secondary menu lists any hidden measures.

Choose the one you want to reexpose in the report.

Tip: If you want to add a new measure to the report, you must return to the original request and add the field there.

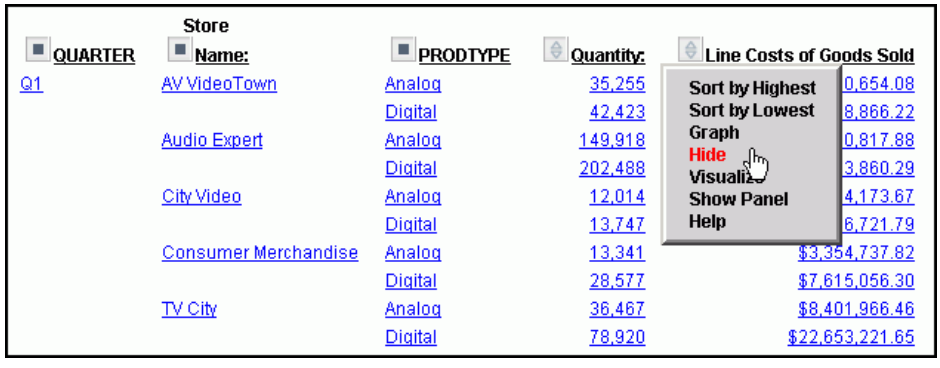
Example: Hiding and Exposing a Measure From the Report

The following is an example of hiding and exposing a measure from the report.

1. Run the Standard Report *OLAPREP2*.

The report includes two measures: Quantity and Line Cost of Goods Sold.

2. Right-click the *Line Cost of Goods Sold* and choose *Hide* from the menu, as shown in the following image.



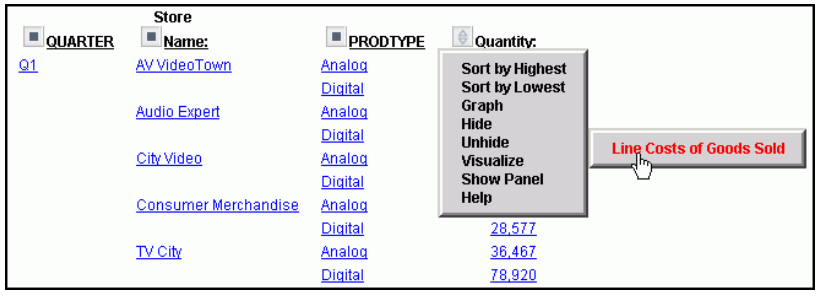
Note: The options available may vary, depending on your OLAP format settings. For more information, see *Setting OLAP Reporting Options* on page 122.

The report runs and displays only the Quantity measure.

3. Right-click *Quantity* and select *Unhide*.

A secondary menu displays the hidden measure.

4. Select *LINE_COGS* to redisplay Line Cost of Goods Sold, as shown in the following image.



Note: The options available may vary, depending on your OLAP format settings. For more information, see *Setting OLAP Reporting Options* on page 122.

The report now displays the Line Cost of Goods Sold column, as shown in the following image.

QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	Analog	18,449	3,969,296.00
		Digital	22,206	5,109,400.00
	Audio Expert	Analog	78,449	16,467,146.00
		Digital	105,983	25,092,678.00
	City Video	Analog	6,287	1,315,015.00
		Digital	7,196	1,607,513.00
	Consumer Merchandise	Analog	6,980	1,542,036.00
		Digital	14,957	3,251,090.00
	TV City	Analog	19,077	3,772,119.00
		Digital	41,307	10,128,967.00
	Web Sales	Analog	545	124,366.00
		Digital	829	190,201.00

Procedure: How to Hide or Display a Measure From the Selections Pane

1. Click the down arrow to the left of the Measures control to display a list of the measures in the report.
2. Click the check pane next to a measure to display or hide it. The check pane toggles through three positions.
   - **To hide the measure,** click the check pane until it is blank.
   - **To expose a hidden measure,** click the check pane until you see a check mark.

Tip: You can use the same check pane to display a column of data visualization bar graphs for numeric measures. This setting is represented as a graph in the check pane. For details, see *Visualizing Trends* on page 199.

Example: Hiding and Exposing a Measure Column From the Selections Pane

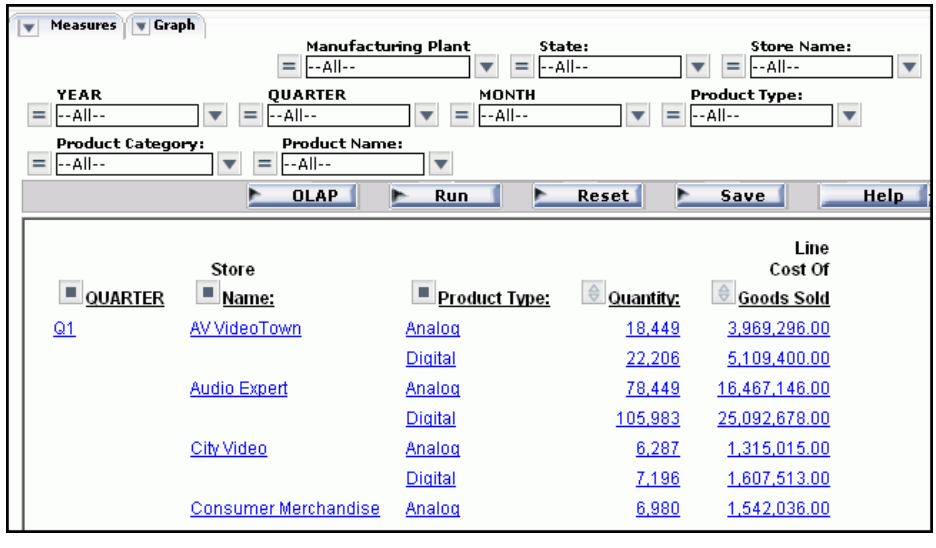
The following is an example of hiding and exposing a measure column from the Selections pane.

1. Run the Standard Report *OLAPREP2*.

   Because of the OLAP settings selected for this report, the Selections pane is hidden. For this example, you will need to expose it.

2. Right-click *QUARTER* and select *Show Panel* from the menu.

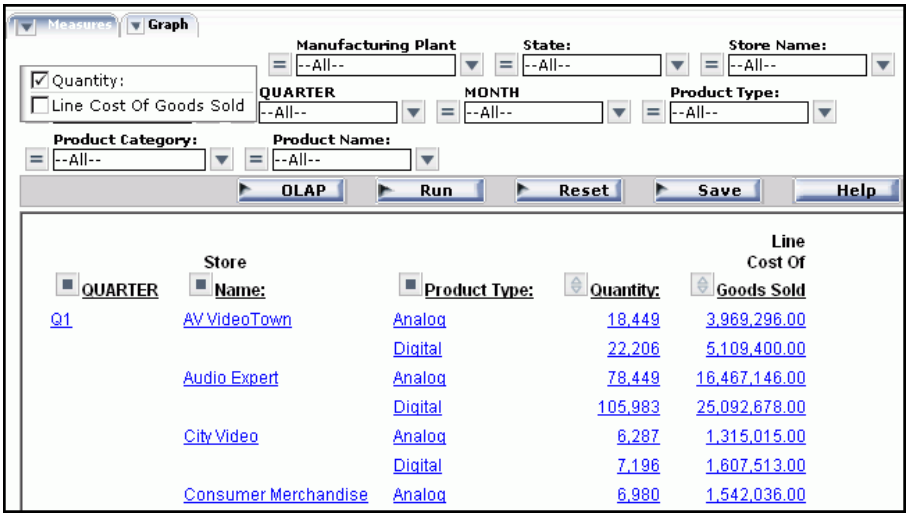
   As shown in the following image, the report now looks like this: two measures (Quantity and Line Cost of Goods Sold) appear.



QUARTER	Store Name:	Product Type:	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	Analog	18,449	3,969,296.00
		Digital	22,206	5,109,400.00
	Audio Expert	Analog	78,449	16,467,146.00
		Digital	105,983	25,092,678.00
	City Video	Analog	6,287	1,315,015.00
		Digital	7,196	1,607,513.00
	Consumer Merchandise	Analog	6,980	1,542,036.00

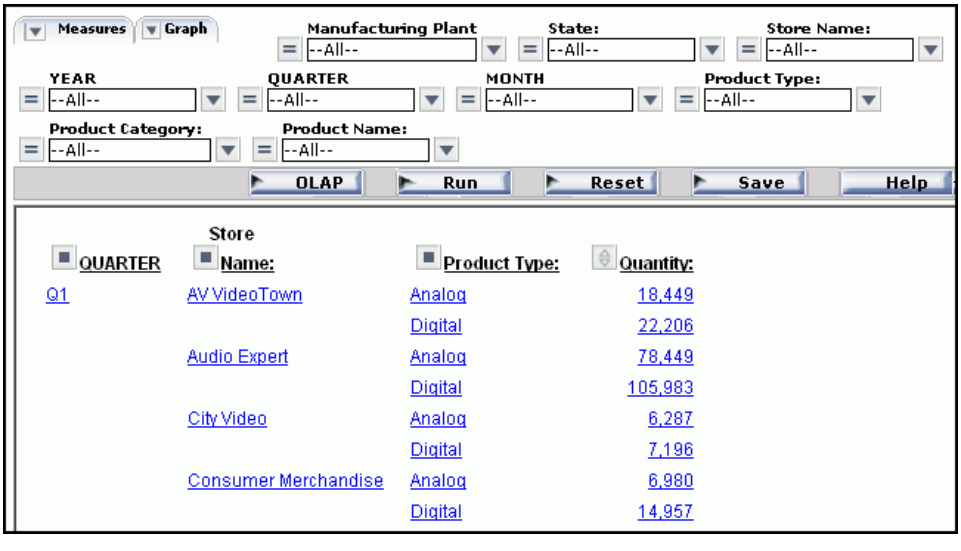
3. In the Selection pane, click the arrow to the left of the Measures control to list the measures in the report. Notice that both measures are checked.

4. To hide *Line Cost of Goods Sold*, click the check panel until it is blank, as shown in the following image.

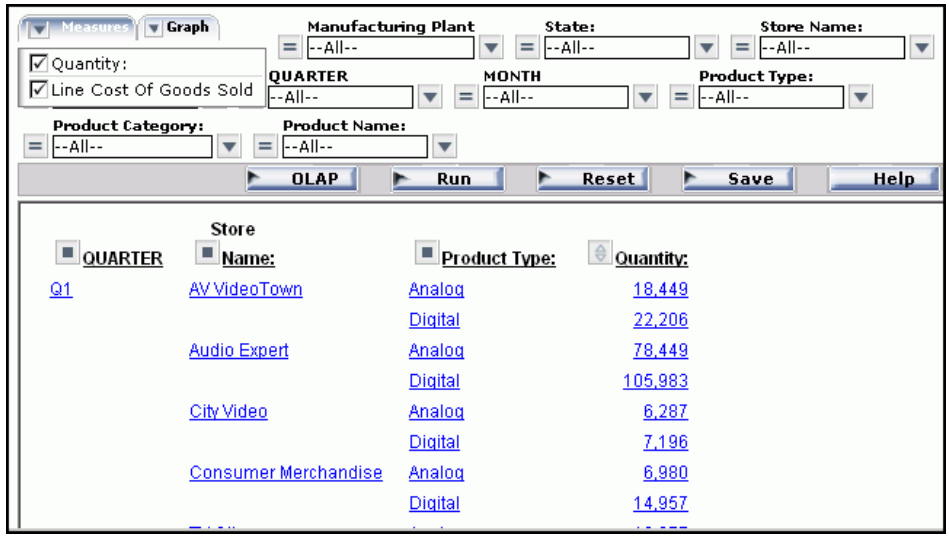


5. Click the *Run* button on the band below the Selections pane.

Only Quantity now appears, as shown in the following image.



6. Open the Measures control again and recheck *Line Cost of Goods Sold*, as shown in the following image.



7. Run the report again.

   The output now looks as it originally did.

Procedure: How to Display or Hide a Measure From the Control Panel

1. Open the Control Panel.
2. In the Measures pane, click the check pane next to a measure to display or hide it. The check pane toggles through three positions.

   - **To hide the measure,** click the check pane until it is blank.
   - **To expose a hidden measure,** click the check pane until you see a check mark.

   Tip: You can use the same check pane to display a column of data visualization bar graphs for numeric measures. This setting is represented as a graph in the check pane. For details, see *Visualizing Trends* on page 199.

3. Click *Run* to execute your report.

Adding and Removing Dimensions

How to:

Add a Dimension Element From the Control Panel

Delete a Dimension Element From the Report

Delete a Dimension Element From the Control Panel

Since all of the values in a dimensions hierarchy are available in an OLAP report, you can add dimensions to the OLAP report at any time, without returning to the original report request. You can add dimensions from:

- An OLAP report.
- The Control Panel.

Procedure: How to Add a Dimension Element From the Control Panel

1. Open the Control Panel.
2. Select a report layout pane (Drill Down or Drill Across) to indicate how you want the new sort dimension to be used in the report.
3. Expand a dimension in the Dimensions pane at the top of the window, then click the dimension element you want to add to the designated layout pane. The new dimension is added to the bottom of the list.
4. If you wish to change the position of the new sort field, click the up arrow to reposition it.
5. Click *Run* to execute your report with the new settings.

Example: Adding a Dimension Element From the Control Panel

The following is an example of adding a dimension element from the Control Panel.

1. Run the Standard Report *REP2*.

Initially the report is sorted by quarter, store, and product type, as shown in the following image.

QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	Analog	18,449	3,969,296.00
		Digital	22,206	5,109,400.00
	Audio Expert	Analog	78,449	16,467,146.00
		Digital	105,983	25,092,678.00
	City Video	Analog	6,287	1,315,015.00
		Digital	7,196	1,607,513.00
	Consumer Merchandise	Analog	6,980	1,542,036.00
		Digital	14,957	3,251,090.00
	TV City	Analog	19,077	3,772,119.00
		Digital	41,307	10,128,967.00
	Web Sales	Analog	545	124,366.00
		Digital	829	190,201.00
	eMart	Analog	97,128	21,152,262.00
		Digital	108,221	24,990,368.00
Q2	AV VideoTown	Analog	11,781	2,663,655.00
		Digital	27,377	5,928,507.00
	Audio Expert	Analog	57,944	11,868,758.00
		Digital	111,421	28,064,250.00

You want to sort by month within each quarter.

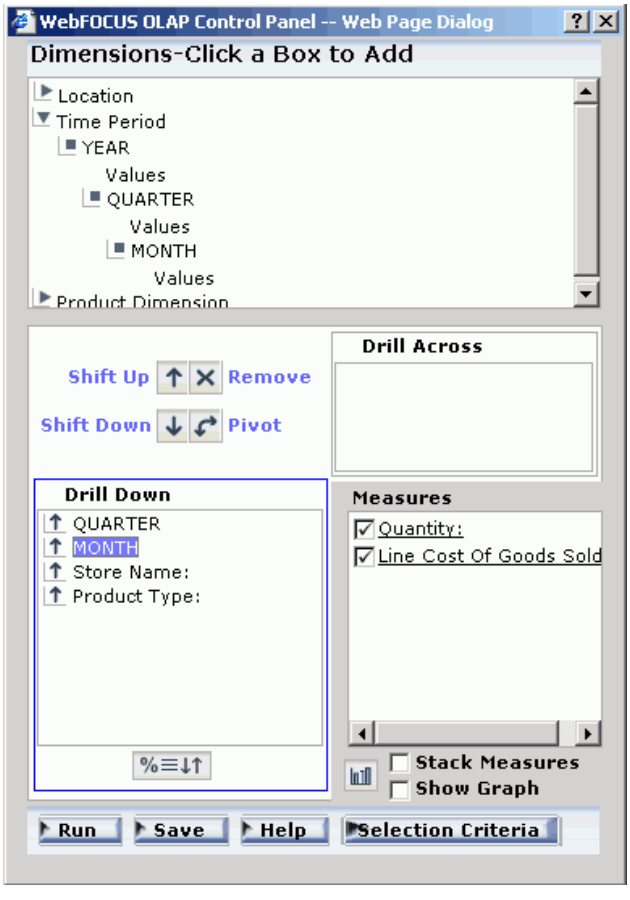
2. Click the square button next to QUARTER to open the Control Panel.

3. In the Control Panel:

   a. Click in the Drill Down panel to activate the buttons immediately above the pane.

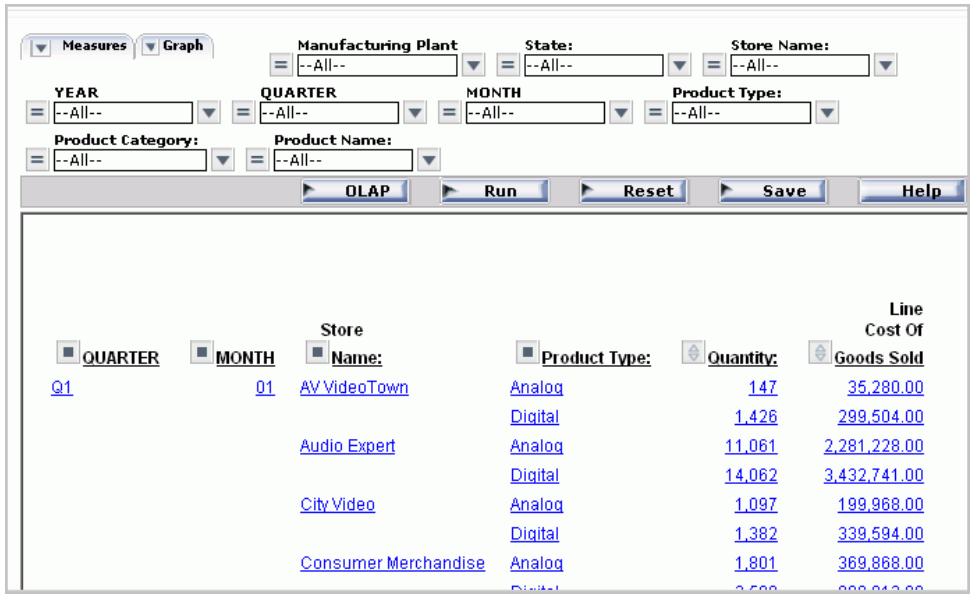
   b. Expand the *Time Period* dimension and click *MONTH*. It is added to the bottom of the Drill Down list.

   c. Click the *Shift Up* arrow twice to move MONTH below QUARTER, as shown in the following image.



4. Click the *Run* button at the bottom of the Control Panel.

The report is now sorted by quarter, month, store, and product type, as shown in the following image.



Procedure: How to Delete a Dimension Element From the Report

Right-click the dimension column you wish to remove and choose *Delete* from the menu.

The report runs automatically.

Example: Deleting a Dimension Element From the Report

The following is an example of deleting a dimension element from the report.

1. Run the Standard Report *OLAPREP2*.

Initially the report is sorted by quarter, store, and product type. You wish to remove PRODTYPE as a sort category.

2. Right-click the *PRODTYPE* column and choose *Delete* from the menu, as shown in the following image.

Note: The options available may vary, depending on your OLAP format settings. For more information, see *Setting OLAP Reporting Options* on page 122.

The report runs automatically. The new report is sorted by quarter and store, as shown in the following image.

Procedure: How to Delete a Dimension Element From the Control Panel

1. Select the element in the Drill Down or Drill Across pane. The buttons above the pane become active.
2. Click *Remove* . The element is deleted from the Drill Down or Drill Across pane.
3. Click *Run* to see the new report.

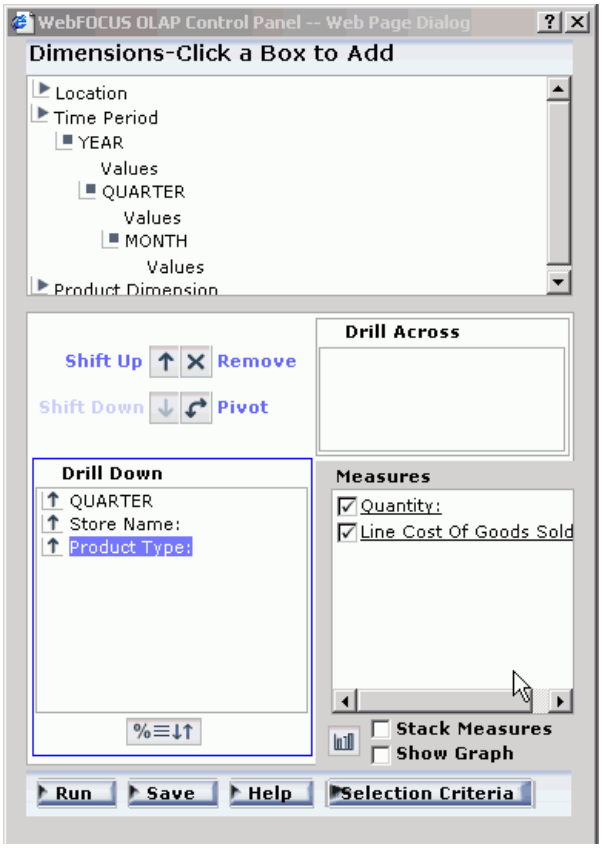
Example: Deleting a Dimension Element From the Control Panel

The following is an example of deleting a dimension element from the Control Panel.

1. Run the Standard Report *OLAPREP2*.

   Initially the report is sorted by quarter, store, and product type. You wish to remove PRODTYPE as a sort category.
2. Click the square icon button next to QUARTER to open the Control Panel.

3. Select *PRODTYPE* in the Drill Down pane, as shown in the following image.



4. Click the *Remove* button.
5. Click the *Run* button at the bottom of the Control Panel.

The new report is sorted by quarter and store, as shown in the following image.

QUARTER	Store Name:	Quantity:	Line Cost Of Goods Sold
Q1	AV VideoTown	40,655	9,078,696.00
	Audio Expert	184,432	41,559,824.00
	City Video	13,483	2,922,528.00
	Consumer Merchandise	21,937	4,793,126.00
	TV City	60,384	13,901,086.00
	Web Sales	1,374	314,567.00
	eMart	205,349	46,142,630.00
Q2	AV VideoTown	39,158	8,592,162.00
	Audio Expert	169,365	39,933,008.00
	City Video	10,240	2,310,831.00
	Consumer Merchandise	23,795	5,515,318.00
	TV City	45,344	10,236,165.00
	Web Sales	2,507	562,332.00
	eMart	189,839	41,760,915.00

Saving OLAP Reports

In this section:

Uniform Field Name Referencing in OLAP

The following is related to saving OLAP reports:

- Administrators, users, and developers can save their reports in Excel, PDF, or active report format.
- Field name referencing is uniform throughout the OLAP product. For example, the AS or TITLE phrases will appear in reports generated using the OLAP Selections pane or the OLAP Control Panel (OCP).
- When saving OLAP reports to Managed Reporting, you must refresh the Domain to see the newly saved reports. Otherwise, the new reports will not be listed in the Managed Reporting tree.

Uniform Field Name Referencing in OLAP

The manner in which a developer designs a report with regard to field referencing carries through to both the OCP and the OLAP Selections pane. Field referencing does not differ between the report and the OCP and OLAP Selections pane. Field references by AS, TITLE, or field name, are uniform in the report output and OLAP controls.

Note: For Developer Studio 7.7 and subsequent releases, Business Views with the same name as the original Master File will output in OLAP when fully-qualified field names are turned on. This includes instances where the fully-qualified field name is not the same as the segment name. For all releases previous to Developer Studio 7.7, the fully-qualified field name must be the same as the segment name to ouput in OLAP.

Saving and Displaying OLAP Reports and Graphs in Other Formats

In this section:

Saving OLAP Reports and Graphs in the My Reports Folder

How to:

Display an OLAP Report and Graph in PDF Format

Save an OLAP Report and Graph as an Excel File

Display an OLAP Report and Graph as an HTML Active Technologies Report

OLAP reports and graphs appear in your browser in HTML format. You can display the report and corresponding graph in PDF, Excel, and active report formats, and in folders within Managed Reporting.

The following save and/or display options are available:

- PDF is useful when you want a report or graph to maintain its presentation and layout regardless of a browser or printer type.

  When you choose PDF format, the report appears in Adobe Acrobat Reader and the graph continues to appear above it in a browser window. If you print from Acrobat, only the report will be printed.

- Excel is useful when you want to convert a large database to a spreadsheet or save a report and graph in a commonly used Office tool. Two Excel formats are available:

  - Excel 2000 supports most StyleSheet attributes, allowing for full report formatting. The computer on which the report is being displayed must have Microsoft Excel 2000 or higher installed.

    When you choose Excel 2000, the report and graph are displayed in the same tool where you can manipulate the data using Excel options. From Excel you can print both the report and the graph.

    When you save in Excel 2000 format, only explicit drill-downs (based on parameters passed from the base report to the drill-down report) continue to work. Automatic drill downs on Dimensions and Measures are not supported in Excel.

  - Excel is a binary display format with limited formatting support. The computer on which the report is being displayed must have Microsoft Excel installed.

    Drill-downs of any kind are not supported.

- Using an active report is useful when you want to create a self-contained HTML report that is designed for offline analysis. You can interact with the data, using analysis options similar to those found in an Excel workbook, without any connection to a server.

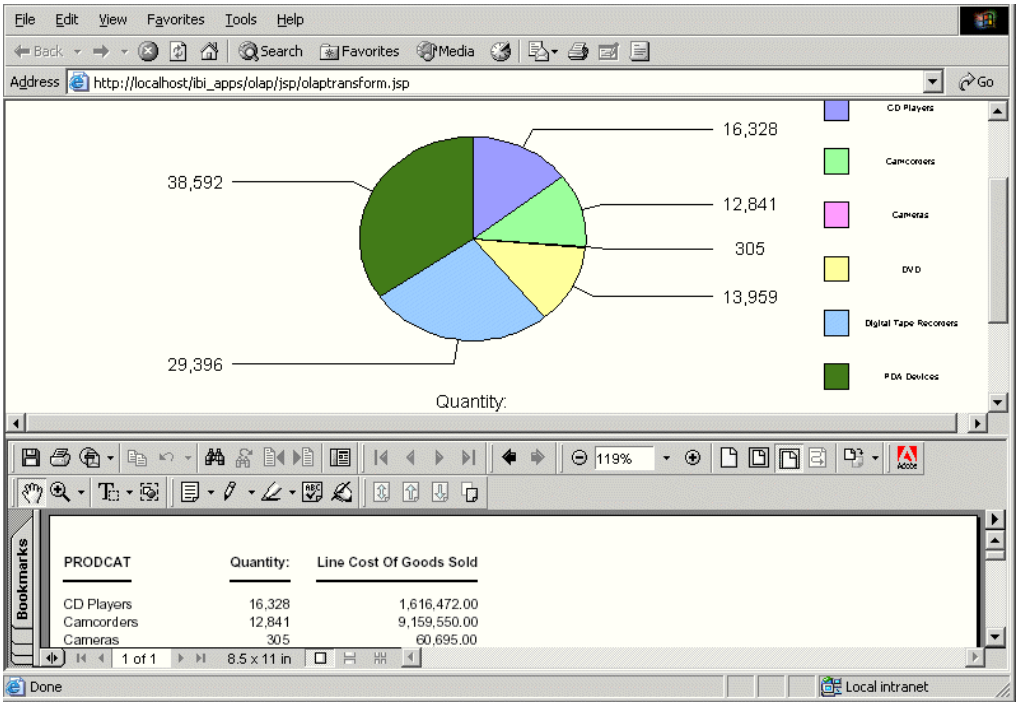
In Managed Reporting:

- A user can save the HTML output in the My Reports folder.
- A developer can save the HTML output in the Others folder, where it can be distributed to users as a Standard Report. Developers can refer to the *WebFOCUS Managed Reporting Developer's Manual* for details on how to save a transformed report as a Standard Report.

Procedure: How to Display an OLAP Report and Graph in PDF Format

1. Open the Control Panel.
2. Click the *Save* button at the bottom of the window.
3. Select *Display as a PDF Report*.

The graph appears in the browser above the report, while a second browser opens and launches the report output in Adobe Acrobat, as shown in the following image.



Tip: If you wish, you can save and print the PDF report from Adobe Acrobat.

Procedure: How to Save an OLAP Report and Graph as an Excel File

1. Open the Control Panel.
2. Click the *Save* button at the bottom of the window.
3. Select *Save the data in an Excel file* or *Save the data in an Excel 2000 file*.
4. Follow the instructions to export the data.

Procedure: How to Display an OLAP Report and Graph as an HTML Active Technologies Report

1. Open the OLAP Control Panel.
2. Click the *Save* button at the bottom of the window.
3. Select *Display as active report (Offline Analysis)*.
4. The report and graph appear in a separate window as an HTML active report.

Saving OLAP Reports and Graphs in the My Reports Folder

In Managed Reporting, you can save an OLAP report and graph in your My Reports folder.

1. Open the Control Panel.
2. Click the *Save* button at the bottom of the window.
3. Select *Save as My Reports*.

   A secondary window opens.
4. Enter a descriptive name and click *OK* to save the graph(s) and the tabular report.

Note: There is no limit to the number of characters in the label legend of a graph, but long labels may appear truncated.

6 Visualizing Trends in Reports

To make your HTML reports more powerful, you can insert visual representations of selected data directly into the report output. These visual representations are in the form of vertical or horizontal bar graphs that make relationships and trends among data more obvious.

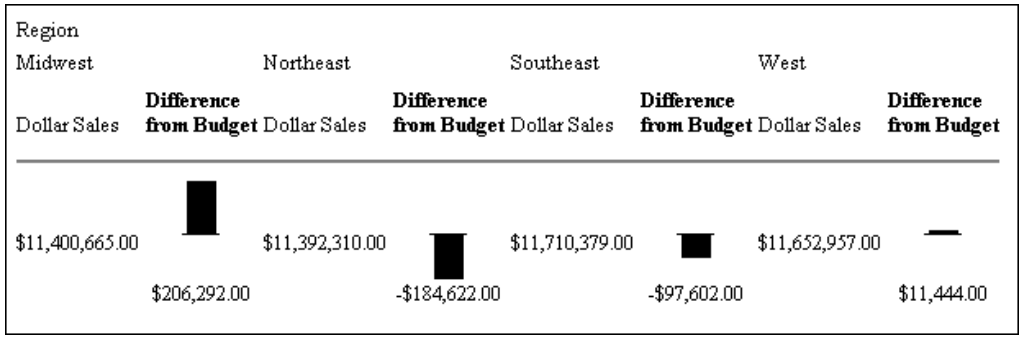
Topics:

- Applying Bar Graphs
- Associating Bar Graphs With Measures

Applying Bar Graphs

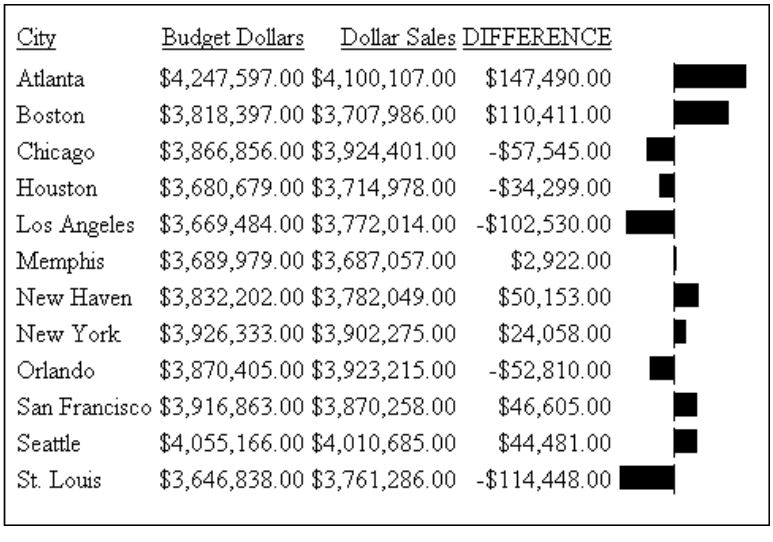
Vertical or horizontal bar graphs highlight relationships and trends among data.

- **Vertical Bar Graph.** You can apply a vertical bar graph to report columns associated with an ACROSS sort field. The report output displays a vertical bar graph in a new row above the associated data values, as shown in the following image.



Bar graphs that project above the zero line represent positive values, while bar graphs that project below the zero line represent negative values.

- **Horizontal Bar Graph.** You can apply a horizontal bar graph to report columns. The report output displays a horizontal bar graph in a new column to the right of the associated data values, as shown in the following image.



Bar graphs that project to the right of the zero line represent positive values, while bar graphs that project to the left of the zero line represent negative values.

The length of each vertical or horizontal bar graph is proportional to the magnitude of its associated data value. The shortest bar graph appears for the value with the minimum magnitude, the longest bar graph for the value with the maximum magnitude, and bar graphs of varying length appear for each value within the minimum-maximum magnitude range. Notice in the figure that a value of 147,490.00 produces a longer horizontal bar graph than a value of 50,153.00. Therefore, a complete row of vertical bar graphs or a complete column of horizontal bar graphs forms a bar chart.

You can only apply data visualization bar graphs to numeric report columns (integer, decimal, floating point single-precision, floating point double-precision, and packed). Bar graphs applied to alphanumeric, date, or text field formats are ignored.

You can display data visualization bar graphs in OLAP-enabled HTML reports, where bar graphs are applied to Measures.

Associating Bar Graphs With Measures

In this section:

Data Visualization Bar Graph Attributes

Applying Bar Graphs to Measures in an OLAP Report

Applying Bar Graphs to Measures Using the Selections Pane or Control Panel

You can associate data visualization bar graphs with any numeric measure that appears in the report output.

The type of bar graph that you can apply depends on the placement of the dimensions included in the report:

- If all report dimensions are vertical (By) sort fields (listed in the Drill Down box in the OLAP Control Panel), you can apply a horizontal bar graph to the specified measures.
- If any dimension is a horizontal (Across) sort field (listed in the Drill Across box in the OLAP Control Panel), you can apply a vertical bar graph to the specified measures.

For more information about OLAP reports, see *Analyzing Data in an OLAP Report* on page 111.

Data Visualization Bar Graph Attributes

The following table outlines the default attributes used to display data visualization bar graphs applied from the OLAP selections pane or the OLAP Control Panel. The first column lists the bar graph attribute, while the second column lists the default value.

Bar graph attribute	Default value
Color	Positive values: Blue Negative values: Red
Length	Vertical bar graph: 60 pixels Horizontal bar graph: 80 pixels
Width	The size of the font in the report output is used to define a default value for the width of the bar graph.

Note: Currently, you cannot modify bar graph attributes from the OLAP selection panel or the OLAP Control Panel.

Applying Bar Graphs to Measures in an OLAP Report

How to:

Apply Bar Graphs to Measures in an OLAP Report

The quickest way to apply data visualization bar graphs to numeric measures is from the report itself.

Procedure: How to Apply Bar Graphs to Measures in an OLAP Report

1. Right-click the title of a measure column.
2. Choose *Visualize* from the menu.

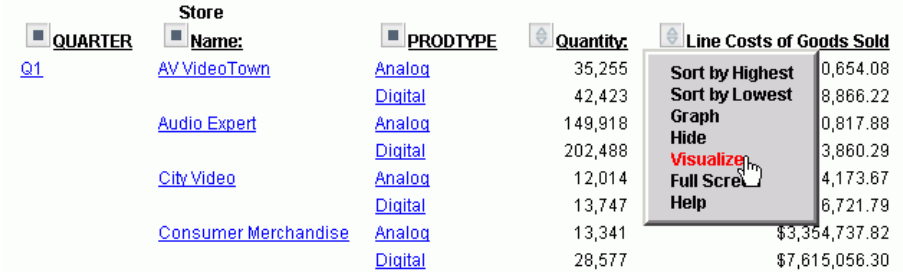
The report runs automatically, displaying a column of bar graphs following the selected measures column.

Tip: To remove the bar graphs, right-click the measure column title and choose *Remove Visualize* from the menu.

Example: Applying and Sorting Bar Graphs in a Report

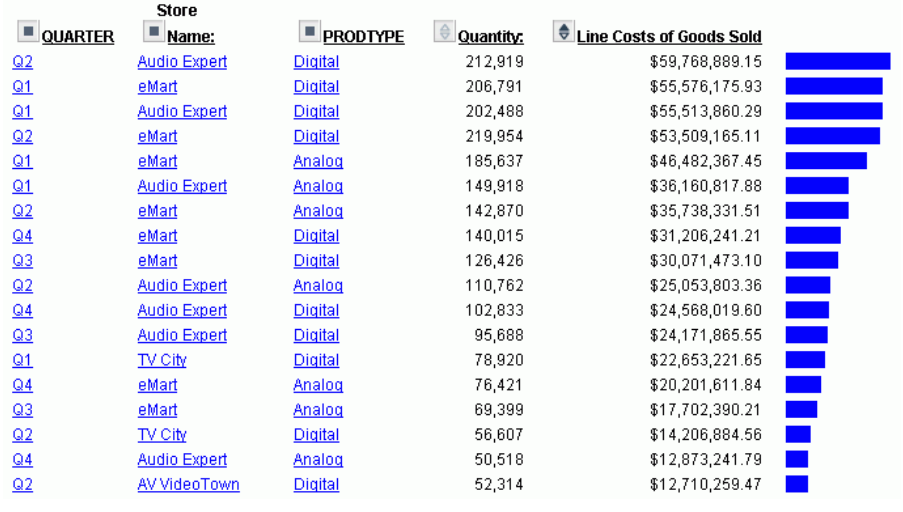
In the following OLAP report:

1. Right-click *Line Cost of Goods Sold* and choose *Visualize* to apply a data visualization bar graph to each value in the column, as shown in the following image.



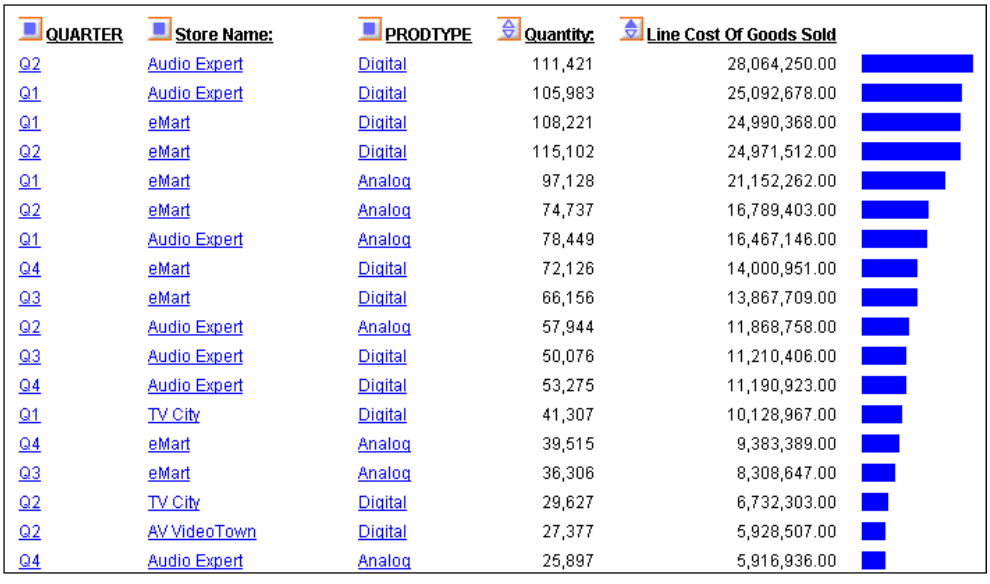
Note: The options available may vary, dending on your OLAP format settings. For more information, see *Setting OLAP Reporting Options* on page 122.

The display changes instantly, as shown in the following image.


Store
QUARTER
Name:
PRODTYPE
Quantity:
Line Costs of Goods Sold
Q2 Audio Expert Digital 212,919 $59,768,889.15
Q1 eMart Digital 206,791 $55,576,175.93
Q1 Audio Expert Digital 202,488 $55,513,860.29
Q2 eMart Digital 219,954 $53,509,165.11
Q1 eMart Analog 185,637 $46,482,367.45
Q1 Audio Expert Analog 149,918 $36,160,817.88
Q2 eMart Analog 142,870 $35,738,331.51
Q4 eMart Digital 140,015 $31,206,241.21
Q3 eMart Digital 126,426 $30,071,473.10
Q2 Audio Expert Analog 110,762 $25,053,803.36
Q4 Audio Expert Digital 102,833 $24,568,019.60
Q3 Audio Expert Digital 95,688 $24,171,865.55
Q1 TV City Digital 78,920 $22,653,221.65
Q4 eMart Analog 76,421 $20,201,611.84
Q3 eMart Analog 69,399 $17,702,390.21
Q2 TV City Digital 56,607 $14,206,884.56
Q4 Audio Expert Analog 50,518 $12,873,241.79
Q2 AV VideoTown Digital 52,314 $12,710,259.47

2. Sort the data by highest value. You can either right-click *Line Cost of Goods Sold* and choose *Sort by Highest*, or click the *Up* arrow (the tool tip reads *Sort LINE_COG highest to lowest*).

The following image shows the results of sorting the data by the highest value.



QUARTER	Store Name:	PRODTYPE	Quantity:	Line Cost Of Goods Sold
Q2	Audio Expert	Digital	111,421	28,064,250.00
Q1	Audio Expert	Digital	105,983	25,092,678.00
Q1	eMart	Digital	108,221	24,990,368.00
Q2	eMart	Digital	115,102	24,971,512.00
Q1	eMart	Analog	97,128	21,152,262.00
Q2	eMart	Analog	74,737	16,789,403.00
Q1	Audio Expert	Analog	78,449	16,467,146.00
Q4	eMart	Digital	72,126	14,000,951.00
Q3	eMart	Digital	66,156	13,867,709.00
Q2	Audio Expert	Analog	57,944	11,868,758.00
Q3	Audio Expert	Digital	50,076	11,210,406.00
Q4	Audio Expert	Digital	53,275	11,190,923.00
Q1	TV City	Digital	41,307	10,128,967.00
Q4	eMart	Analog	39,515	9,383,389.00
Q3	eMart	Analog	36,306	8,308,647.00
Q2	TV City	Digital	29,627	6,732,303.00
Q2	AV VideoTown	Digital	27,377	5,928,507.00
Q4	Audio Expert	Analog	25,897	5,916,936.00

Applying Bar Graphs to Measures Using the Selections Pane or Control Panel

How to:

Apply Bar Graphs to Measures Using the Selections Pane

Apply Bar Graphs to Measures Using the Control Panel

Remove Bar Graphs Using the Selections Pane or Control Panel

Reference:

Display Modes in the OLAP Control Panel

You can apply data visualization bar graphs to any numeric measure.

To indicate the measures for which you want to display bar graphs, you click the check box located to the left of each measure. This check box has three states that control the display modes for the measure.

In the following table the first column shows the three check box states and the second column provides descriptions for the display modes.

Check Box State	Display Mode for the Measure
Check mark	Displays the measure.
Graph icon	Applies a bar graph to the measure and displays both the measure and its associated bar graph.
Blank box	Does not display the measure or an associated bar graph.

You click the check box next to a measure until it reflects the display mode you want.

If an OLAP report contains a measure that does not appear in the report, the Measure control shows a blank check box. To display the measure, click the check box once. To display the associated bar graph, click the check box again.

Note: The three-state check box is *not* active when you apply Stack Measures to your report. These features are mutually exclusive.

Procedure: How to Apply Bar Graphs to Measures Using the Selections Pane

1. From the OLAP selections pane, click the arrow to the left of the Measures control.
2. Click the check box beside each numeric measure to which you want to add a bar graph. The check mark in the box is replaced with the Graph icon.
3. Click *Run*. The new report appears with the associated bar graphs.

Procedure: How to Apply Bar Graphs to Measures Using the Control Panel

1. Click the *OLAP* button in the OLAP selections pane to open the OLAP Control Panel. The Measures box appears in the lower-right corner.
2. If Stack Measures is applied to the report, click the *Stack Measures* check box to turn off this feature.
3. To apply data visualization bar graphs to a measure, click the check box to the left of the measure.

   To apply data visualization graphs to a non-displaying measure, click the check box twice.

The check mark in the box is replaced with the Graph icon. This icon indicates that data visualization bar graphs are applied to the measure. (If you have not done so in step two, this also deactivates the Stack Measures feature.)

You can apply data visualization bar graphs to as many numeric measures as you want.

4. After you select all the measures for which you want to display bar graphs, click *Run*.

   The new report output appears with the associated bar graphs.

5. To continue to modify the report (either data visualization or another OLAP configuration), click the *OLAP* button again.

Procedure: How to Remove Bar Graphs Using the Selections Pane or Control Panel

1. From the Measures drop-down list in the OLAP selections pane or the Measures box in the OLAP Control Panel, click the check box for any measure to which you have applied data visualization bar graphs.

   This removes the Graph icon and displays a blank check box indicating that the measure will not appear in the report output when you run the report.

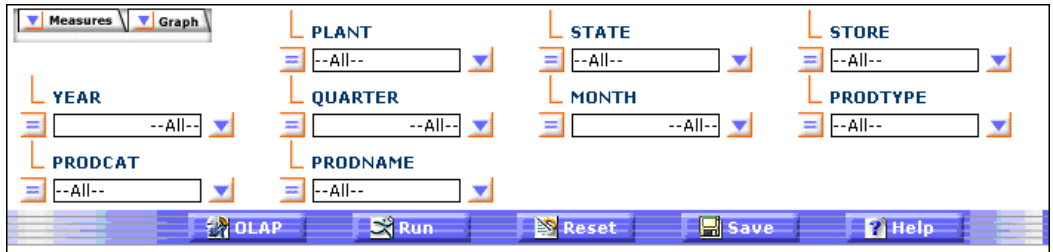
2. To display the measure, click the same check box again. A check mark appears in the box.

3. Click *Run* to display the new report output, where the measure appears without its associated bar graph.

Example: Applying Data Visualization Bar Graphs to Measures Using the Selections Pane

Suppose that you want to associate data visualization bar graphs with the Profit column in the following report in order to represent visually the differences between the Costs for and the Prices of your various Products.

You have created the following OLAP report, as shown in the following image, which displays the report data by Product Name.



PAGE 1

Product Name:	Our Cost:	Price:	Profit
110 VHS-C Camcorder 20 X	744,759.00	1,043,859.00	299100
120 VHS-C Camcorder 40 X	796,943.00	1,227,723.00	430780
150 8MM Camcorder 20 X	1,303,440.00	1,732,489.00	429049
2 Hd VCR LCD Menu	185,889.00	257,939.00	72050
250 8MM Camcorder 40 X	251,520.00	313,614.00	62094
330DX Digital Camera 1024K P	32,437.00	45,477.00	13040
650DL Digital Camcorder 150 X	940,750.00	1,191,175.00	250425
750SL Digital Camcorder 300 X	105,750.00	140,859.00	35109
AR2 35MM Camera 8 X	64,385.00	88,835.00	24450
AR3 35MM Camera 10 X	13,395.00	18,189.00	4794
Combo Player - 4 Hd VCR + DVD	1,166,404.00	1,610,364.00	443960
DVD Upgrade Unit for Cent. VCR	754,909.00	1,080,769.00	325860
QX Portable CD Player	245,916.00	419,796.00	173880
R5 Micro Digital Tape Recorder	297,459.00	383,679.00	86220
ZC Digital PDA - Standard	233,313.00	280,163.00	46850
ZT Digital PDA - Commercial	1,376,805.00	1,968,555.00	591750

To associate data visualization bar graphs with the Profit column:

1. Click the *Measures* drop-down list in the report (or open the OLAP Control Panel by clicking the *OLAP* button), as shown in the following image.

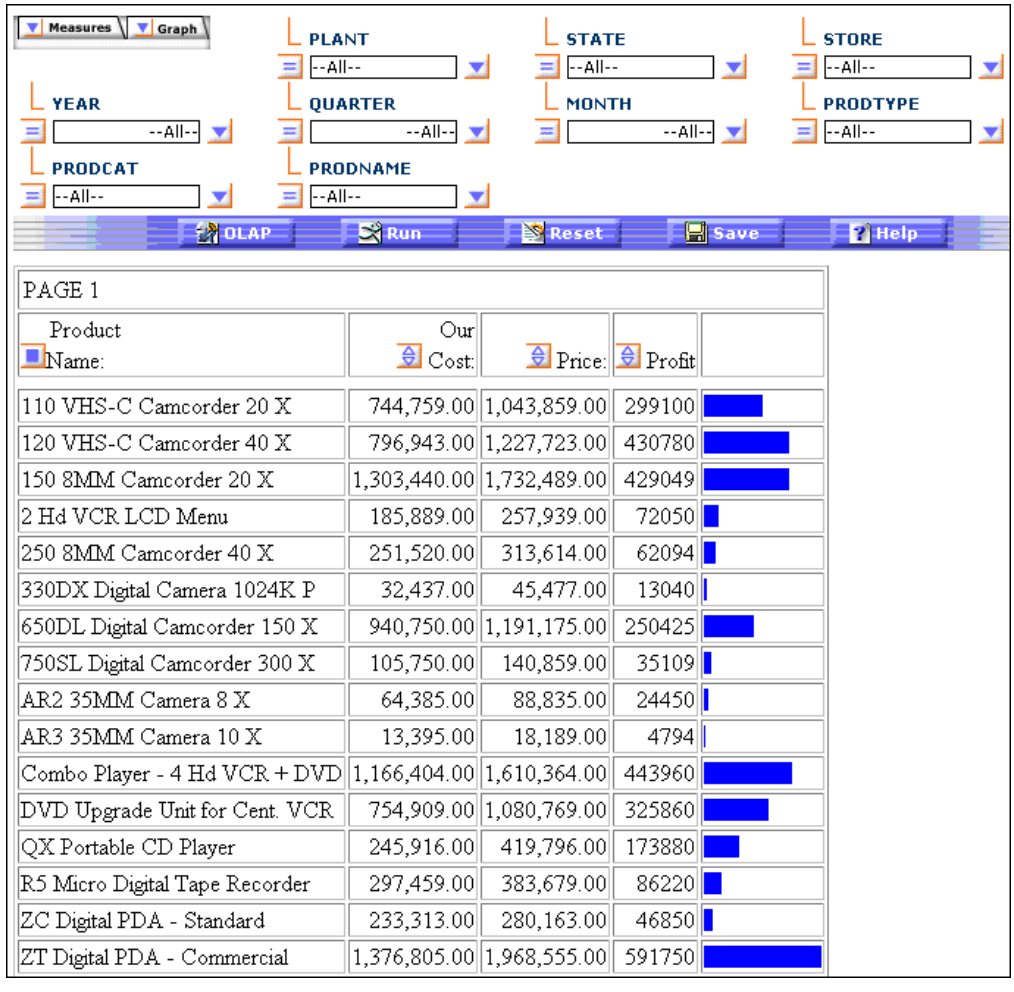
   The check marks indicate that the measures will appear in the report output.

2. Click the *Profit* check box again. The following image shows the Measures drop-down list in the OLAP Control Panel with the Profit check box selected as a Graph icon.

   The Graph icon replaces the check mark. This icon indicates that the measure will appear with its associated bar graph.

3. Click the *Run* button to display the new report output.

Notice that the report now contains a new column to the right of the Profit measure. This column displays a horizontal bar chart comprised of bar graphs that visually represent the individual data values for the Profit measure, as shown in the following image.

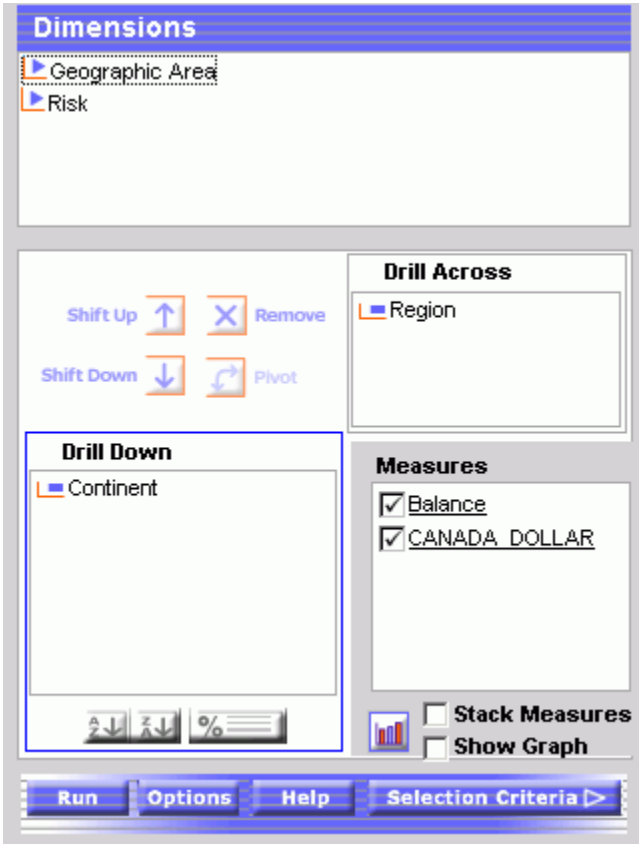


PAGE 1

Product Name:	Our Cost:	Price:	Profit	
110 VHS-C Camcorder 20 X	744,759.00	1,043,859.00	299100	
120 VHS-C Camcorder 40 X	796,943.00	1,227,723.00	430780	
150 8MM Camcorder 20 X	1,303,440.00	1,732,489.00	429049	
2 Hd VCR LCD Menu	185,889.00	257,939.00	72050	
250 8MM Camcorder 40 X	251,520.00	313,614.00	62094	
330DX Digital Camera 1024K P	32,437.00	45,477.00	13040	
650DL Digital Camcorder 150 X	940,750.00	1,191,175.00	250425	
750SL Digital Camcorder 300 X	105,750.00	140,859.00	35109	
AR2 35MM Camera 8 X	64,385.00	88,835.00	24450	
AR3 35MM Camera 10 X	13,395.00	18,189.00	4794	
Combo Player - 4 Hd VCR + DVD	1,166,404.00	1,610,364.00	443960	
DVD Upgrade Unit for Cent. VCR	754,909.00	1,080,769.00	325860	
QX Portable CD Player	245,916.00	419,796.00	173880	
R5 Micro Digital Tape Recorder	297,459.00	383,679.00	86220	
ZC Digital PDA - Standard	233,313.00	280,163.00	46850	
ZT Digital PDA - Commercial	1,376,805.00	1,968,555.00	591750	

Reference: Display Modes in the OLAP Control Panel

The Measures box, from which you select a display mode, is located in the lower-right corner of the OLAP Control Panel, as shown in the following image.



The state of each measure check box determines how the measure appears in the report output. In this illustration:

- The COST and PRICE measures will appear in the report output (check mark in the boxes).
- The Profit measure and its associated bar graph will appear in the report output (Graph icon in the box).

Note that the Stack Measures option is inactive when a bar graph is applied to a measure.

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